

FIG. 1A APPLICATION OF NO VOLTAGE

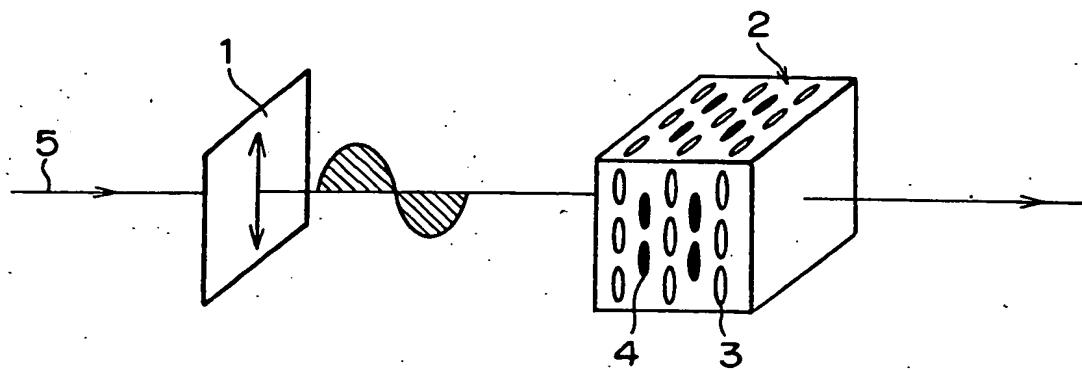


FIG. 1B APPLICATION OF VOLTAGE

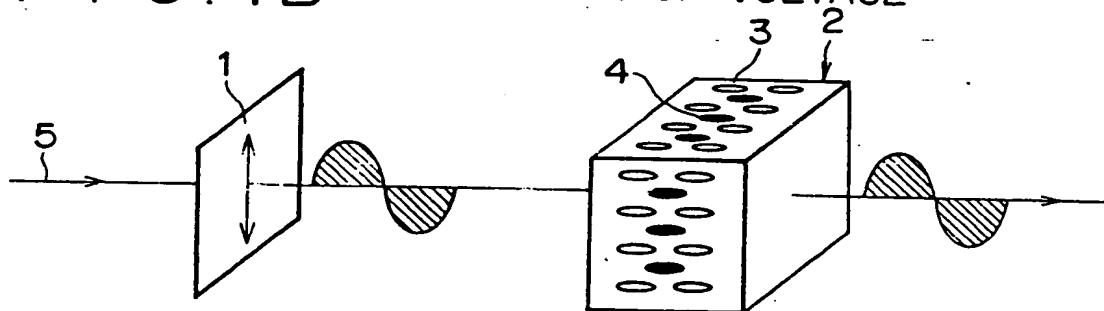


FIG. 1C DRIVE WAVEFORM OF RECTANGULAR WAVE

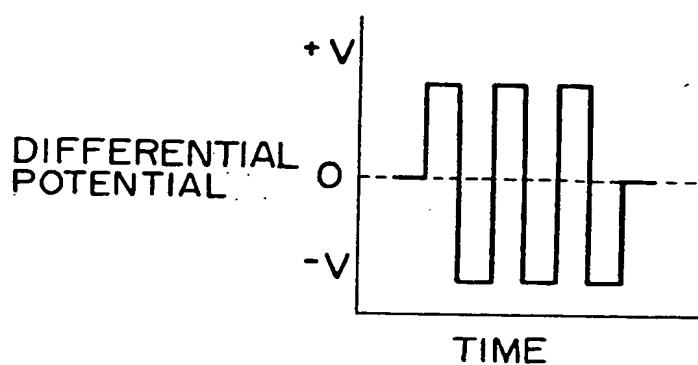


FIG. 2A

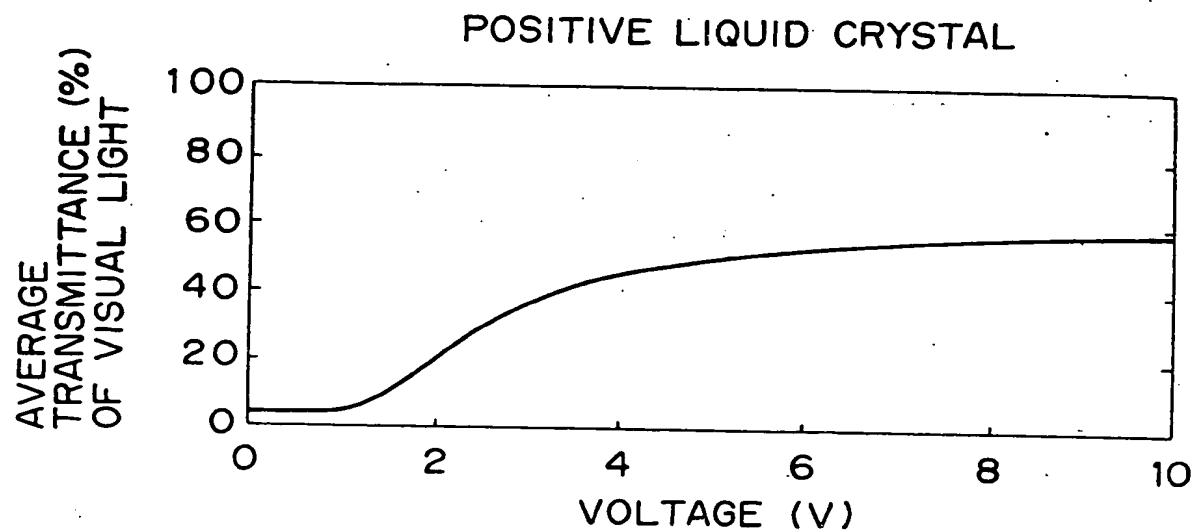


FIG. 2B

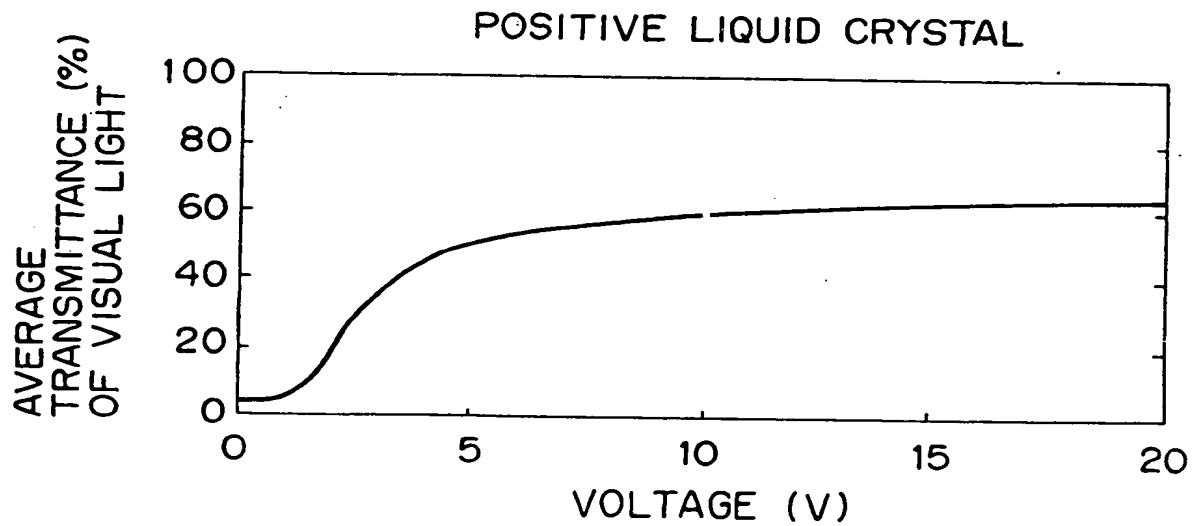


FIG. 3A  
APPLICATION OF NO VOLTAGE

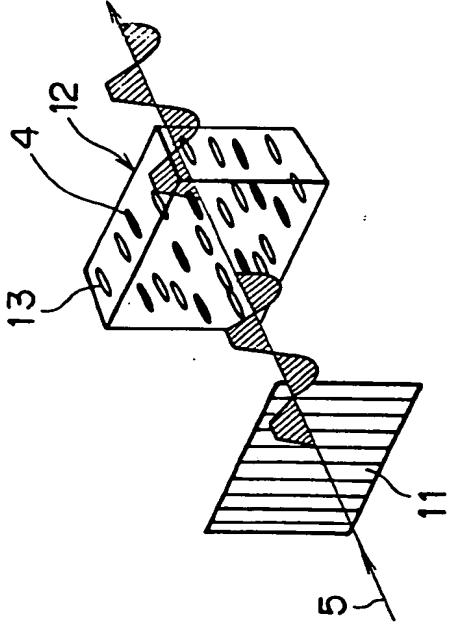


FIG. 3B  
APPLICATION OF VOLTAGE

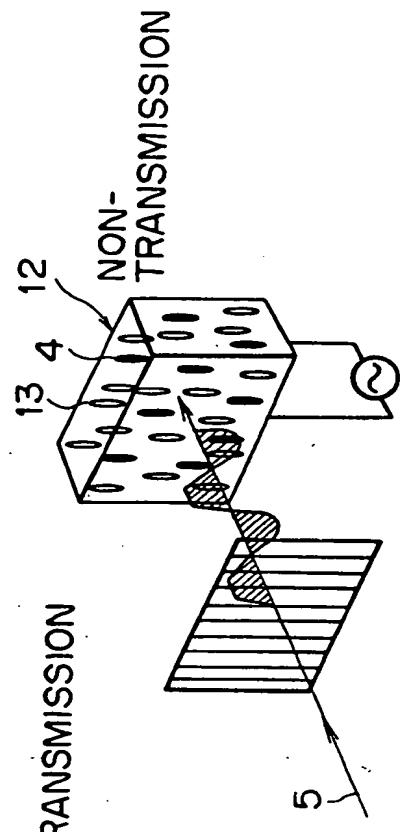


FIG. 3C  
DRIVE WAVEFORM OF  
RECTANGULAR WAVE

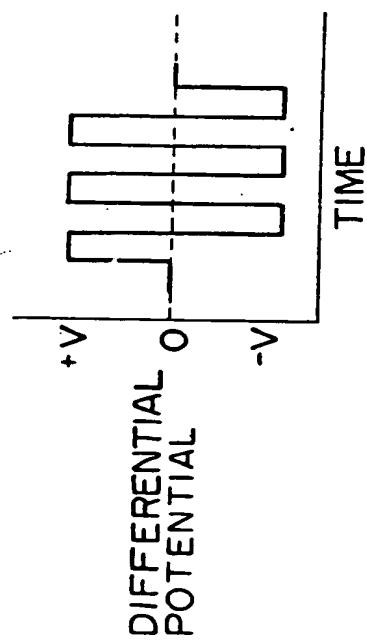


FIG. 4A

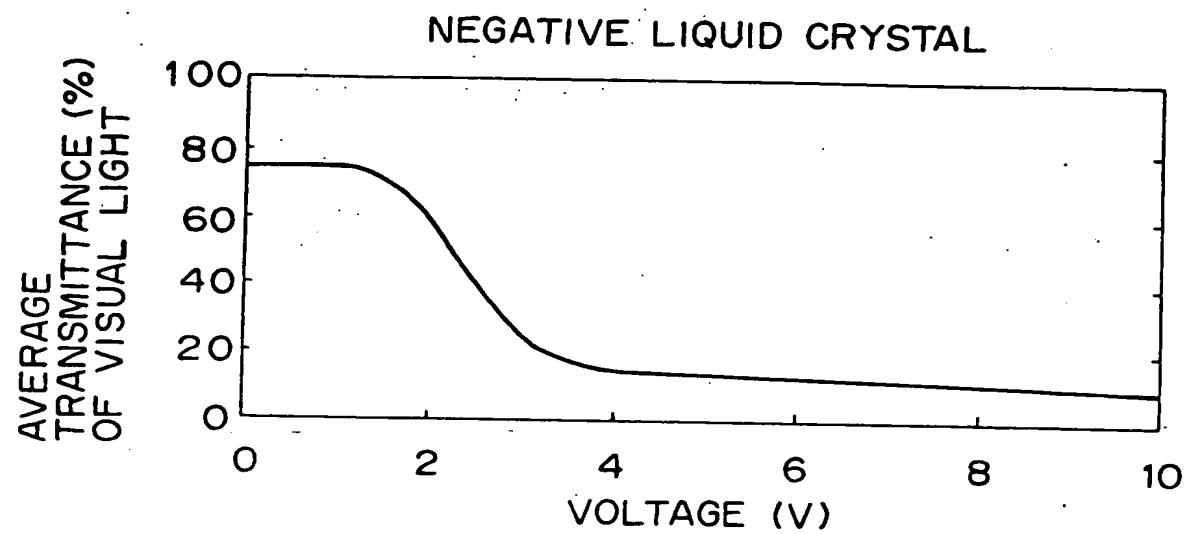


FIG. 4B

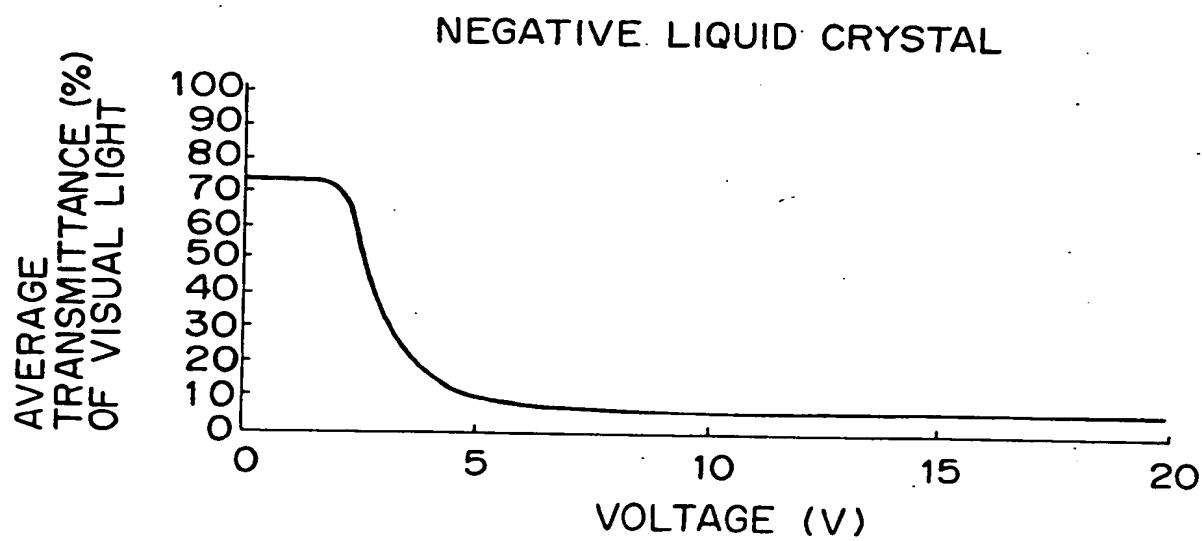


FIG. 5A

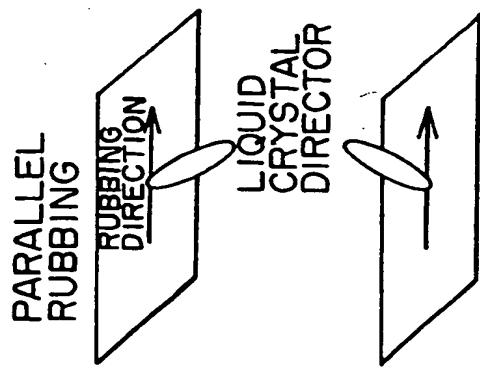


FIG. 5B

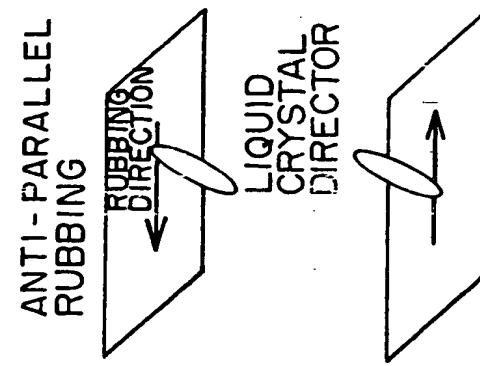


FIG. 5C

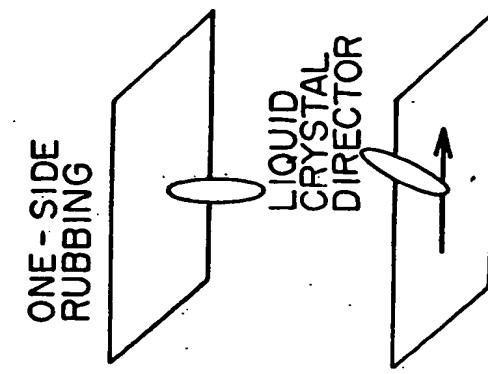


FIG. 6A  
PARALLEL RUBBING CELL

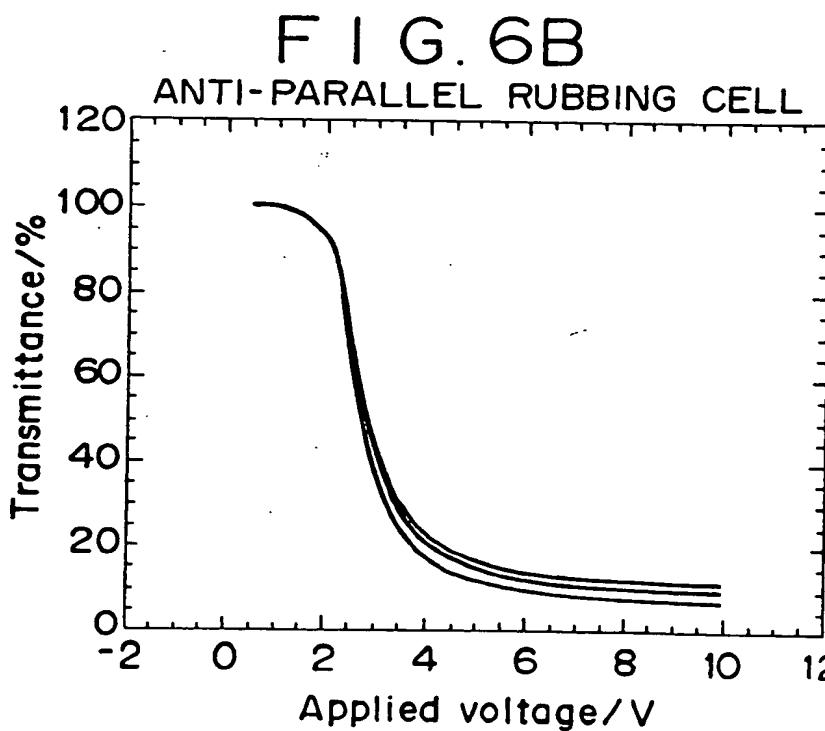
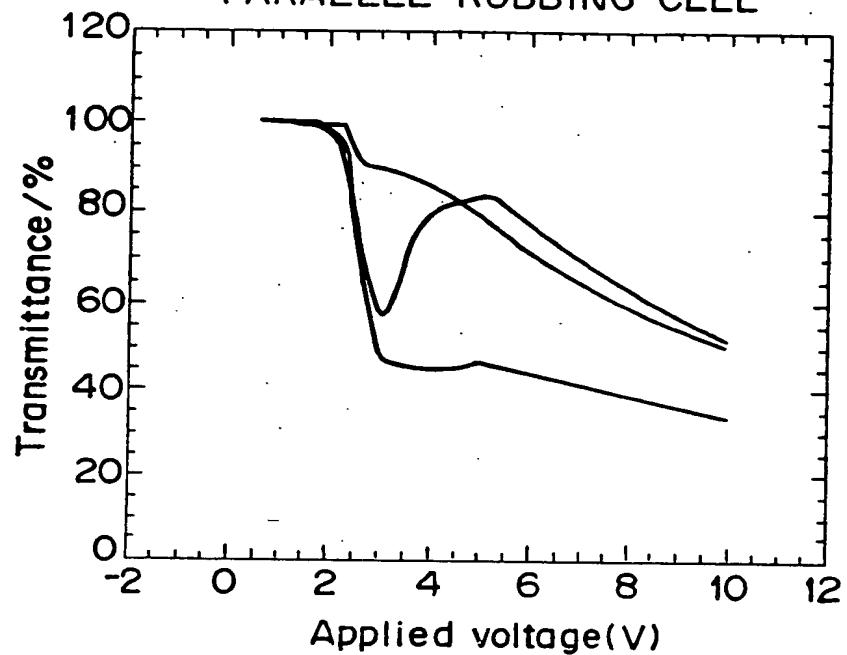


FIG. 6C

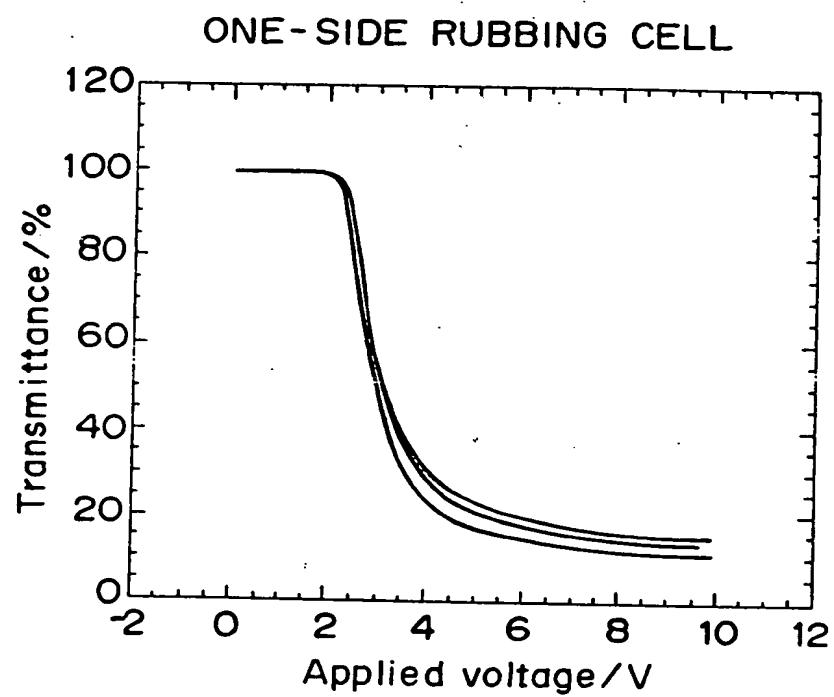


FIG. 7

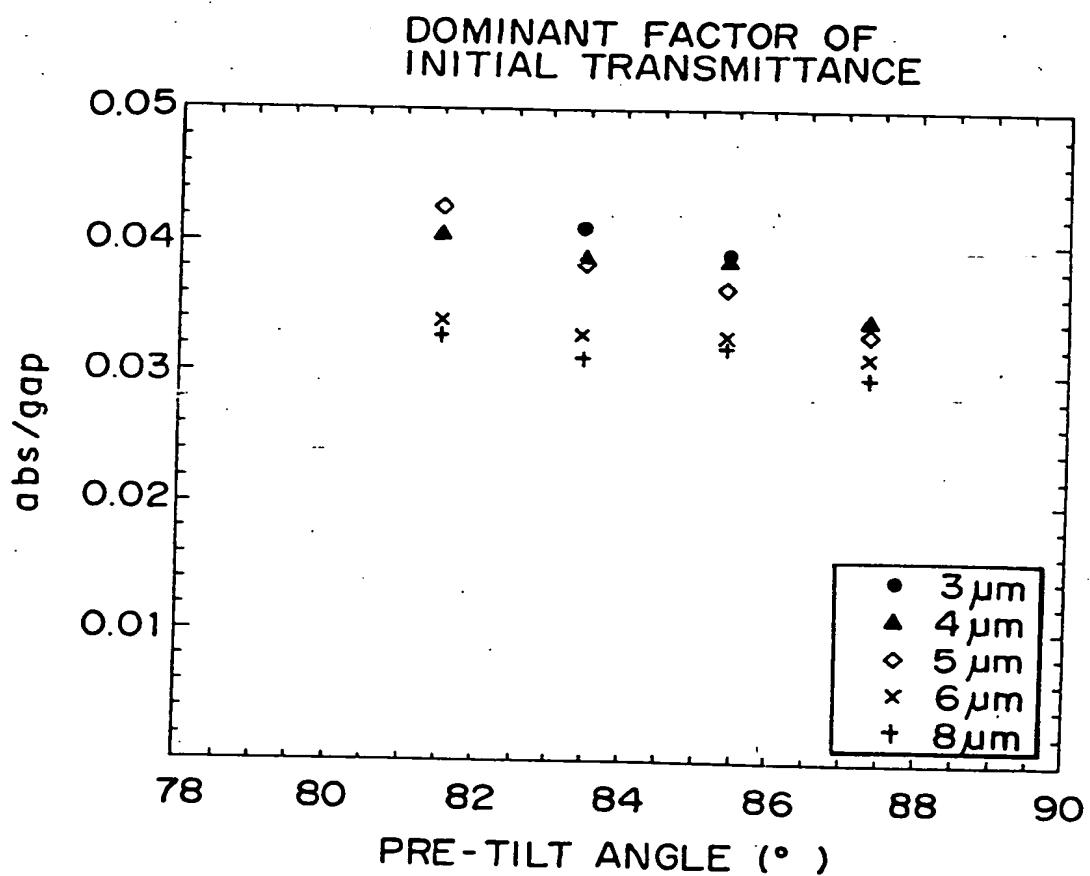


FIG. 8A

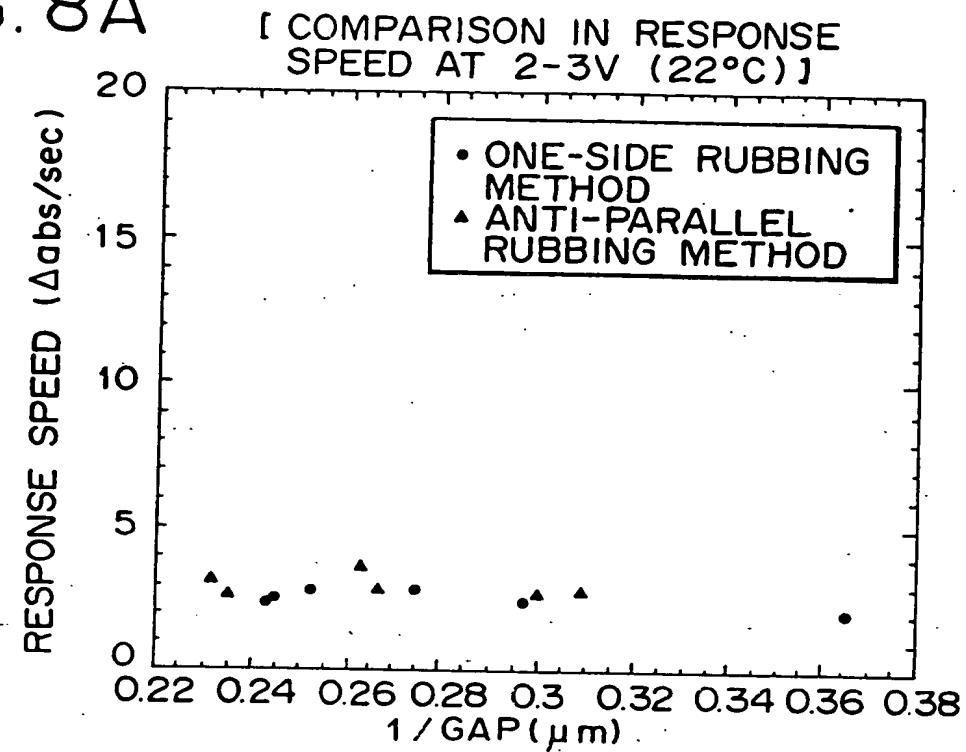


FIG. 8B

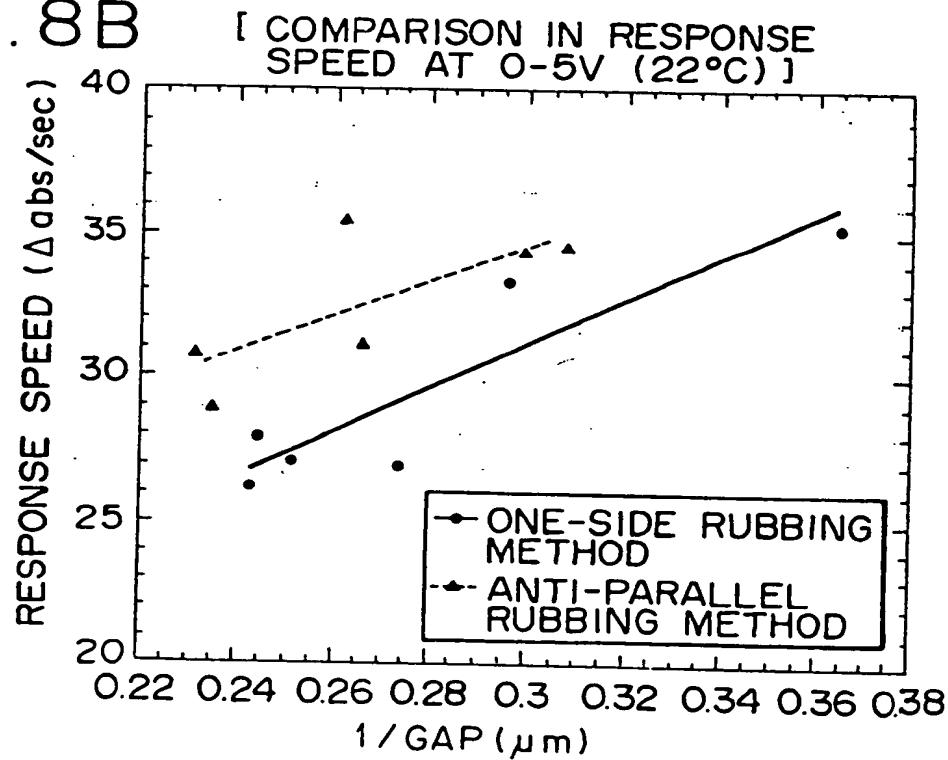


FIG. 8C

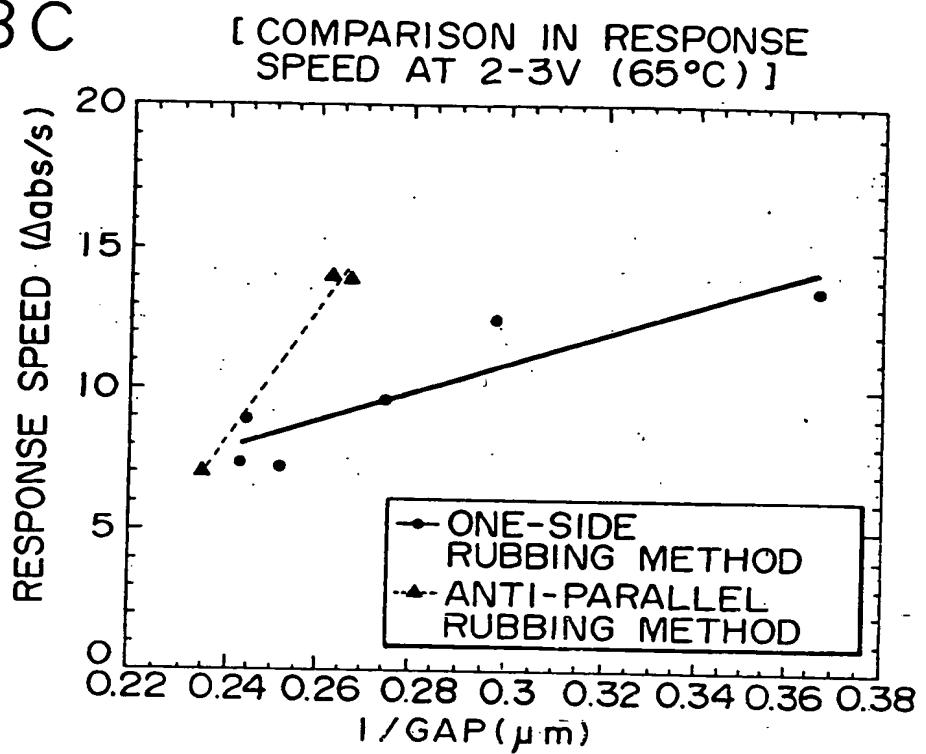


FIG. 8D

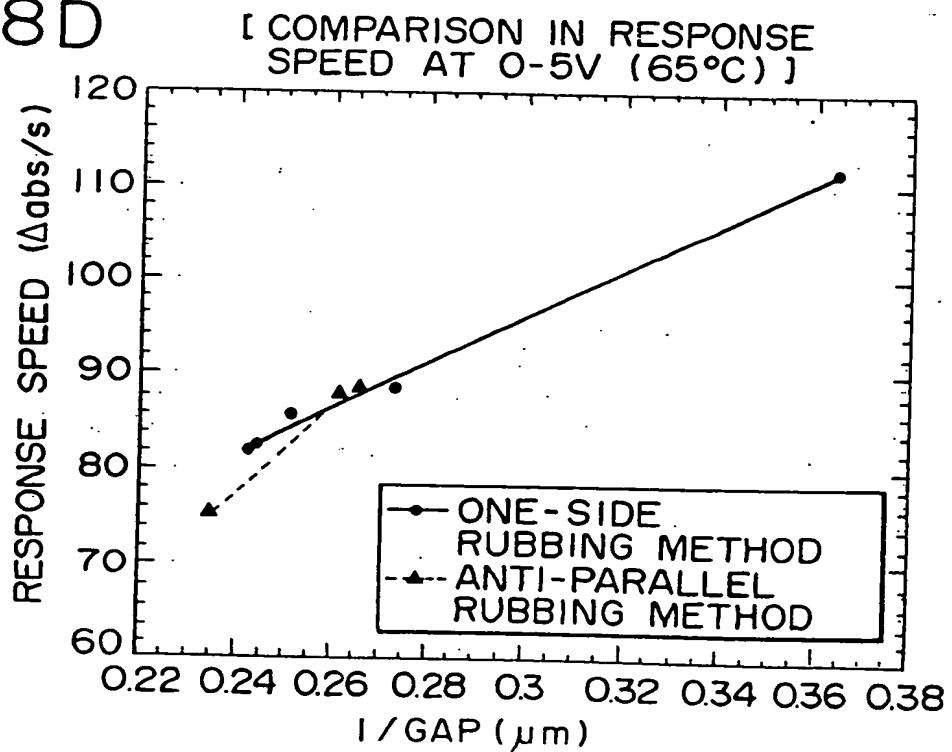


FIG. 9

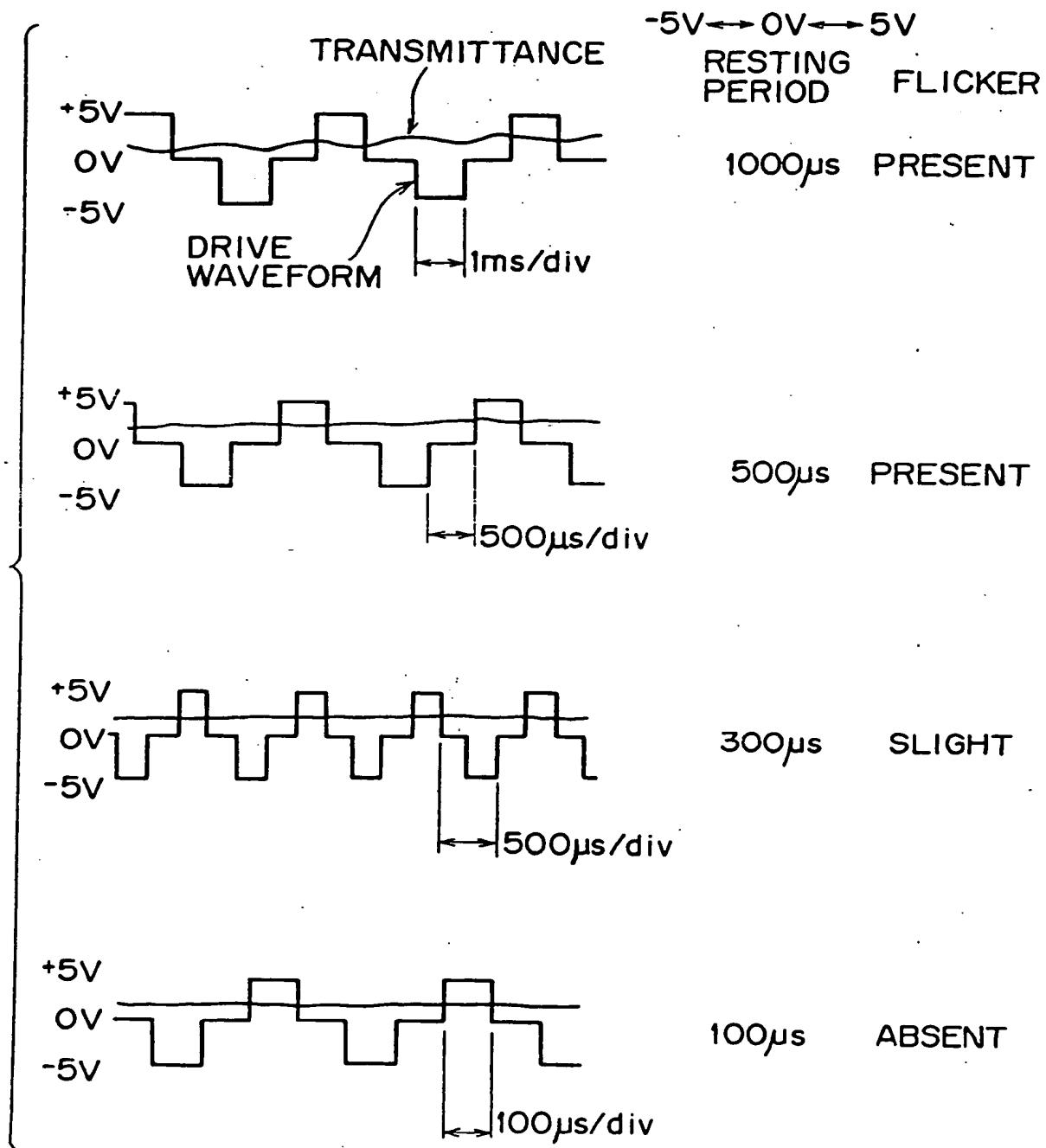


FIG. 10

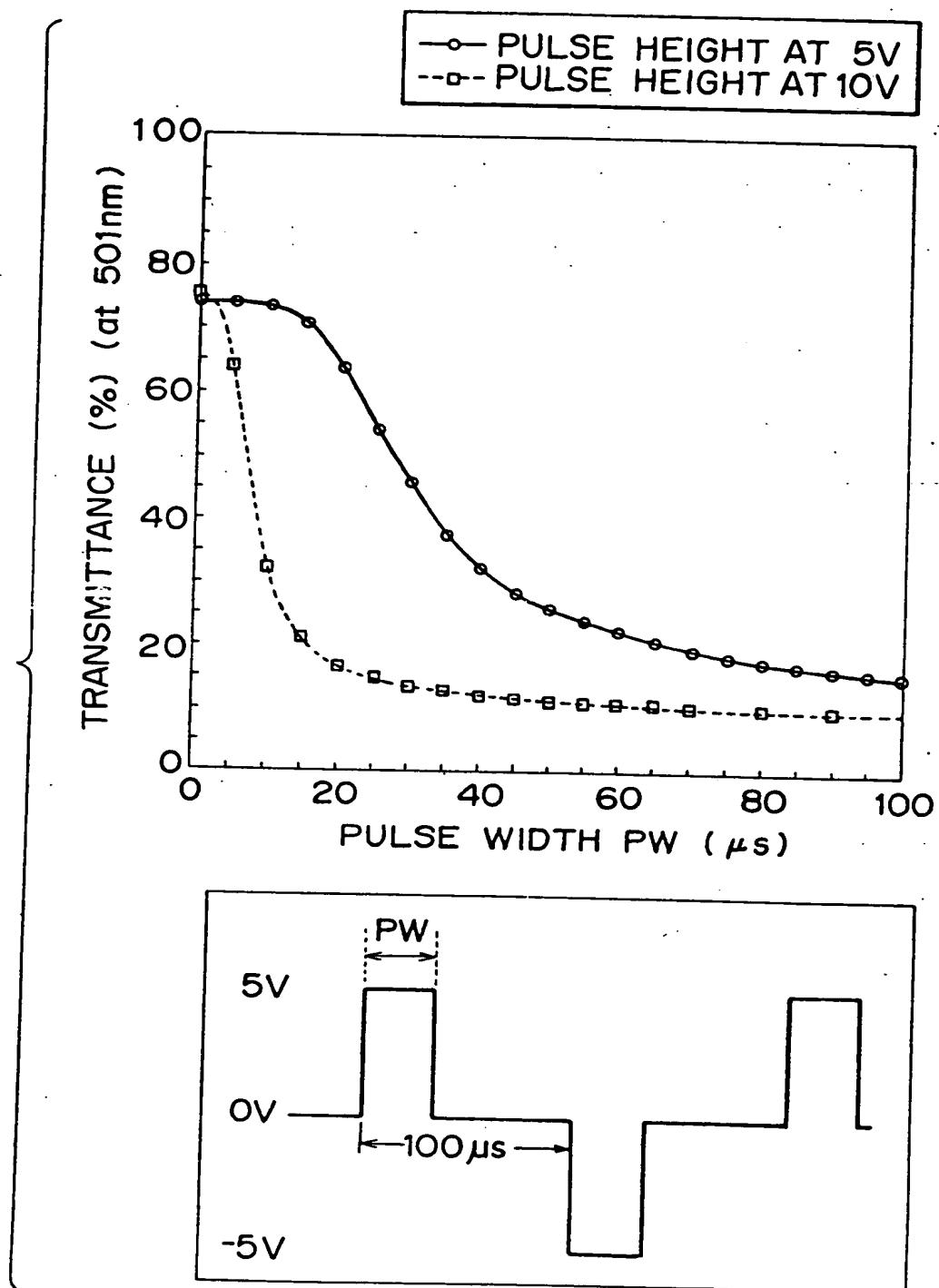


FIG. 11C  
MODULATION OF PULSE DENSITY

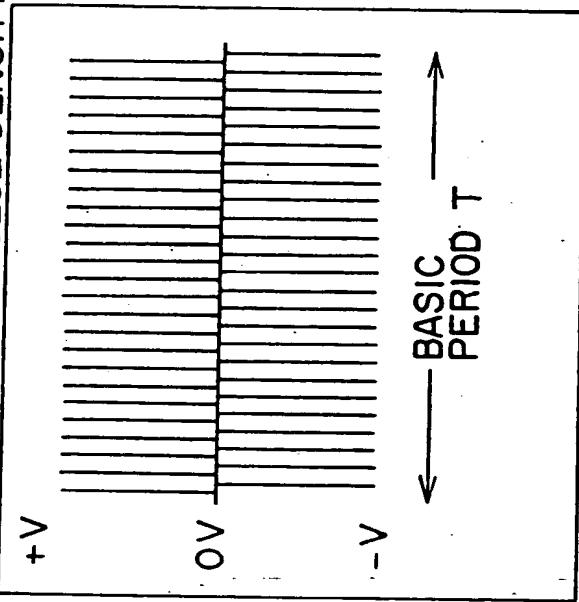


FIG. 11A  
MODULATION OF PULSE WIDTH

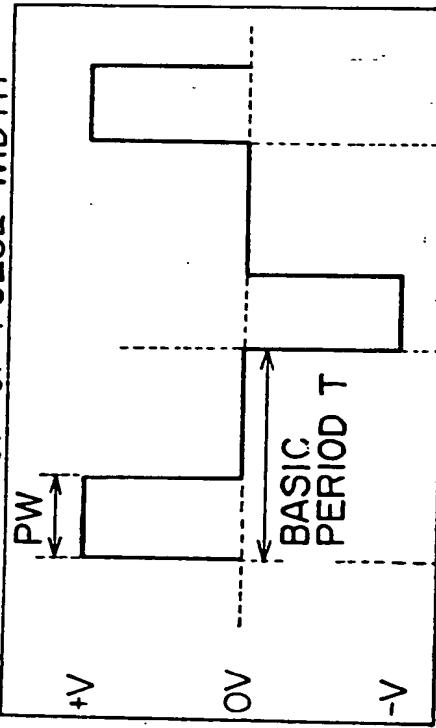
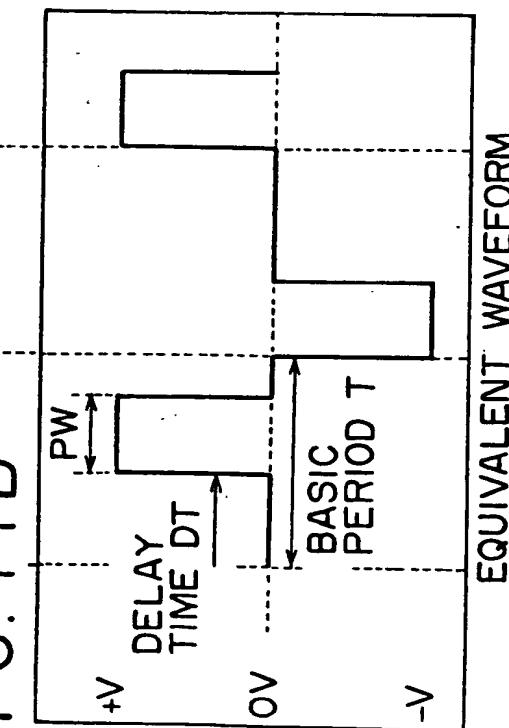
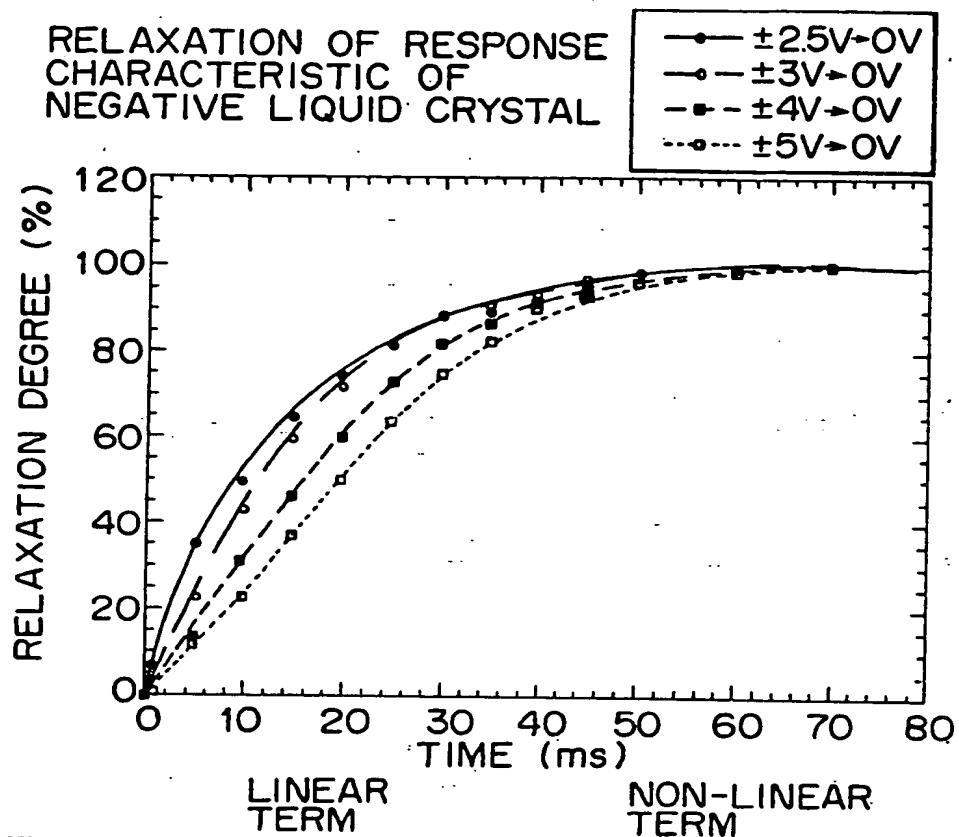


FIG. 11B



EQUIVALENT WAVEFORM

F I G. 12



| RELATION STAGE        | LINEAR TERM |          | NON-LINEAR TERM |          |
|-----------------------|-------------|----------|-----------------|----------|
|                       | $R_1$       | $\tau_1$ | $R_2$           | $\tau_2$ |
| $2.5V \rightarrow 0V$ | 100 %       | 14.2ms   | 0 %             |          |
| $3V \rightarrow 0V$   | 78 %        | 15.8ms   | 22 %            | 17.6ms   |
| $4V \rightarrow 0V$   | 56 %        | 20.4ms   | 44 %            | 21.9ms   |
| $5V \rightarrow 0V$   | 39 %        | 19.7ms   | 61 %            | 26.9ms   |

FIG. 13A

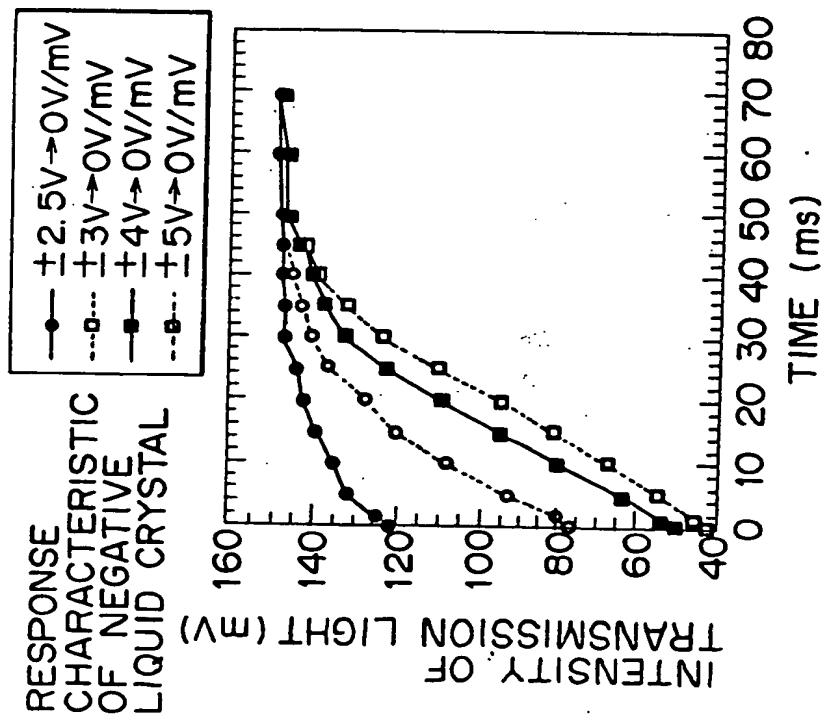


FIG. 13B

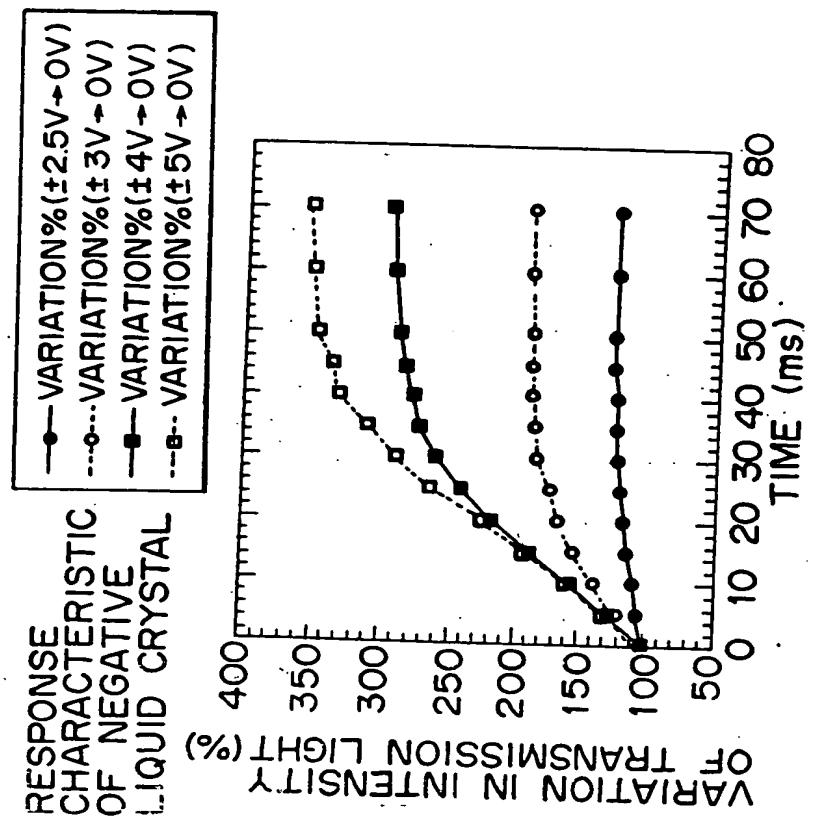
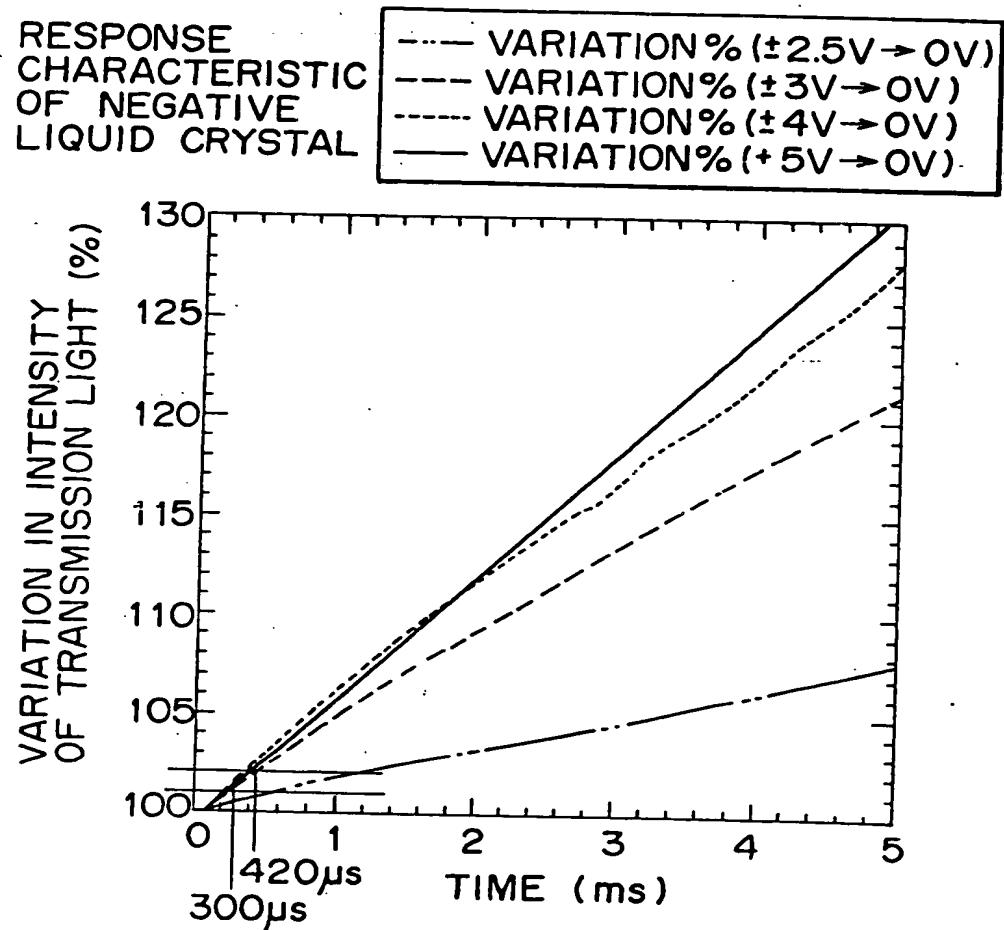
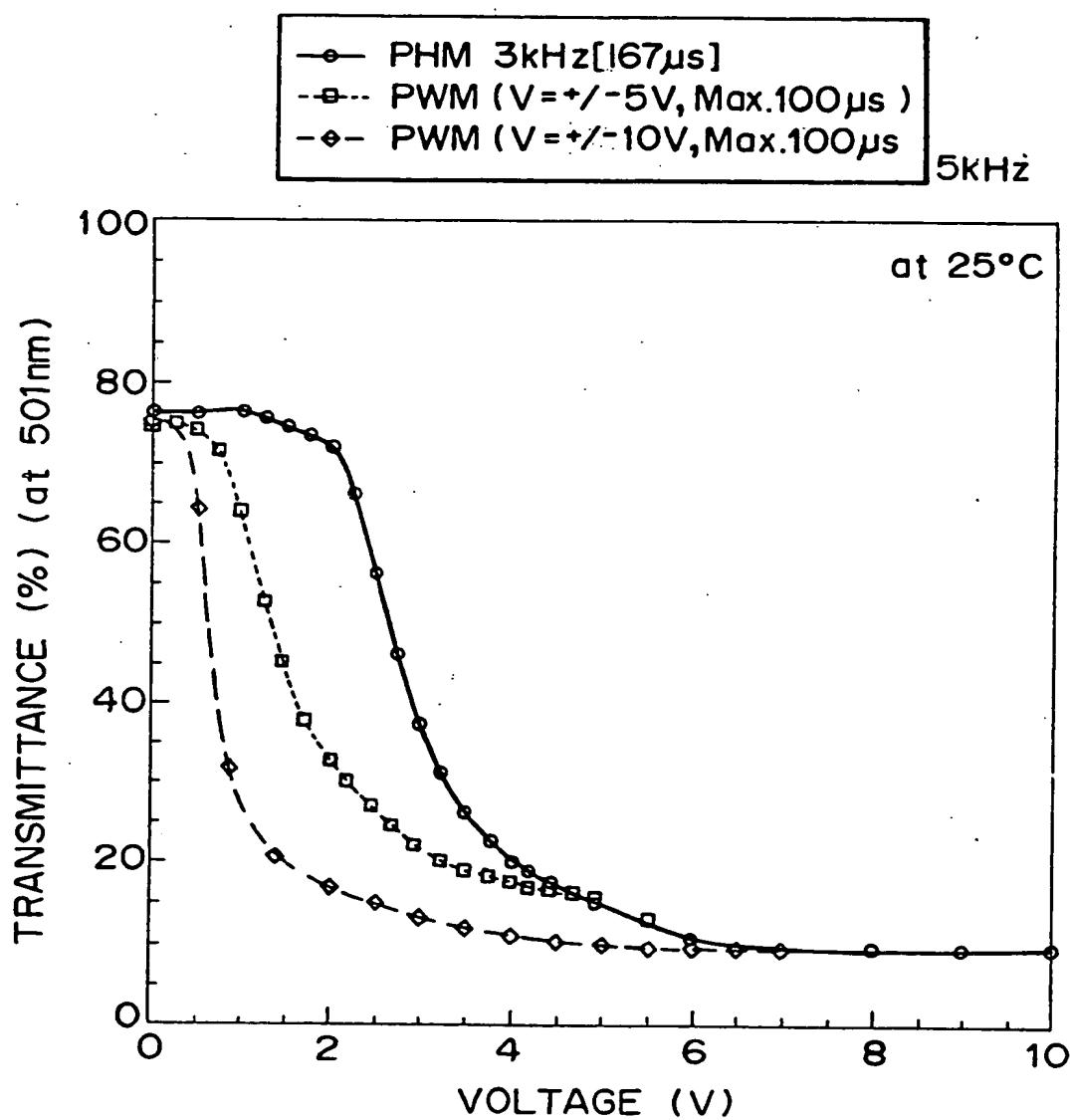


FIG. 13C



F I G. 14



F I G. 15

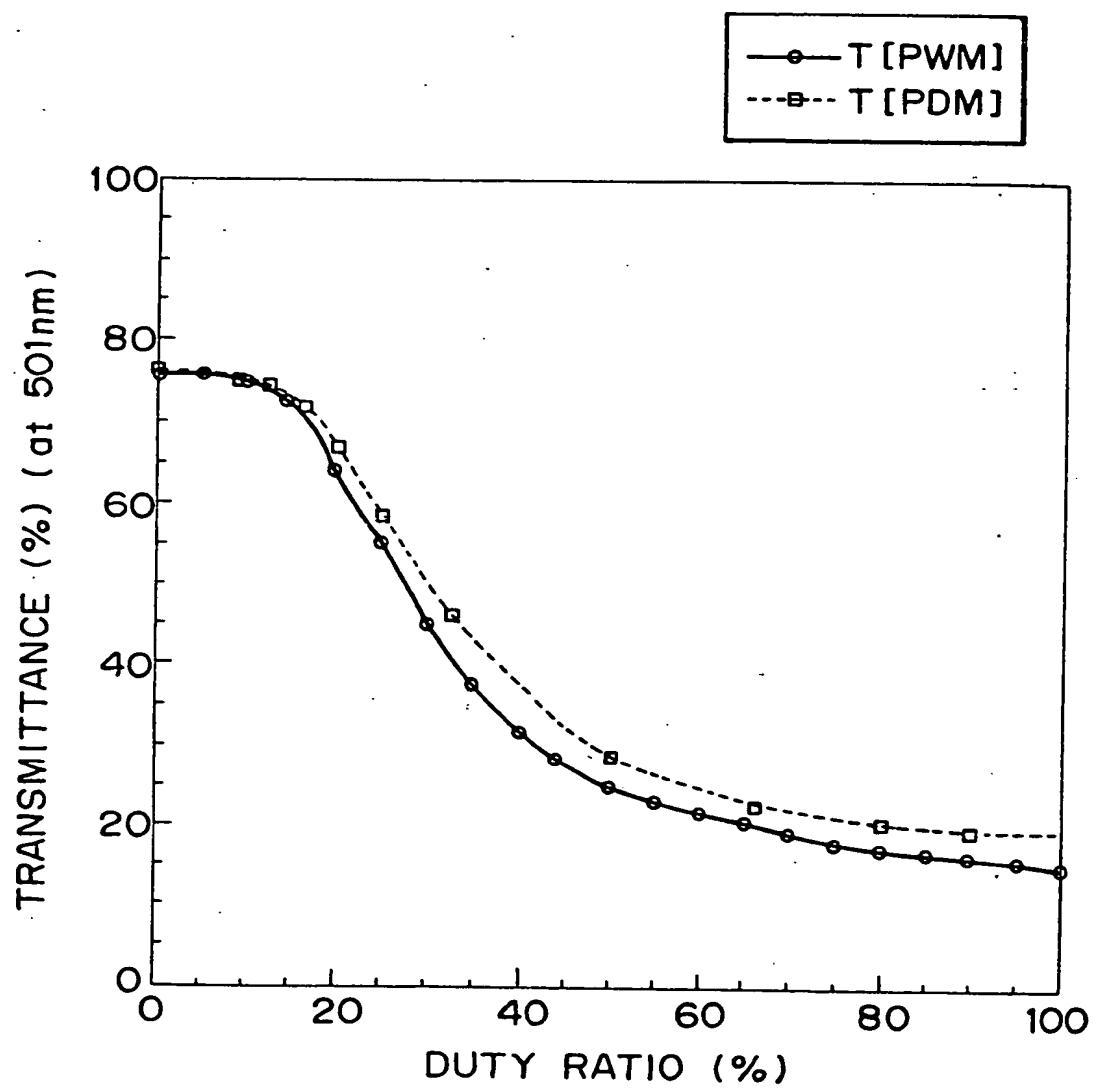


FIG. 16A

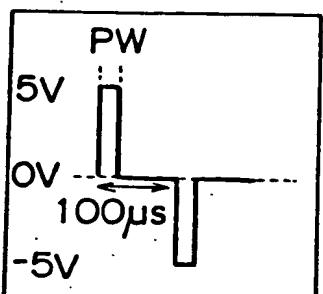


FIG. 16B

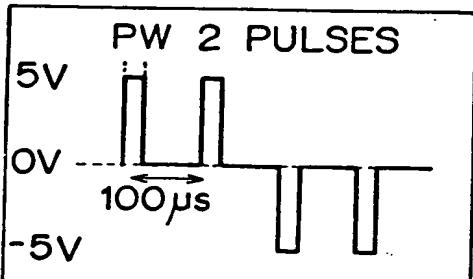


FIG. 16C

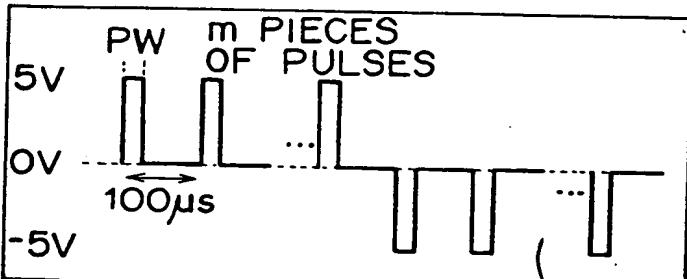


FIG. 16D

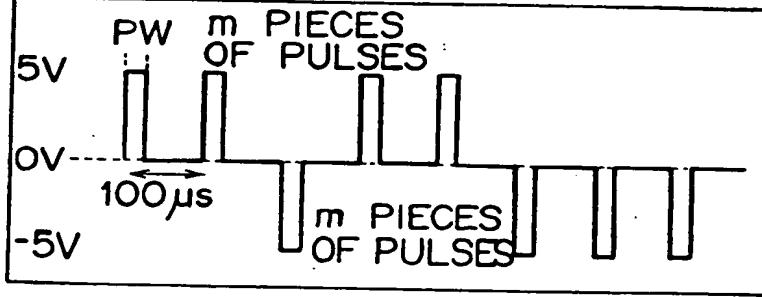
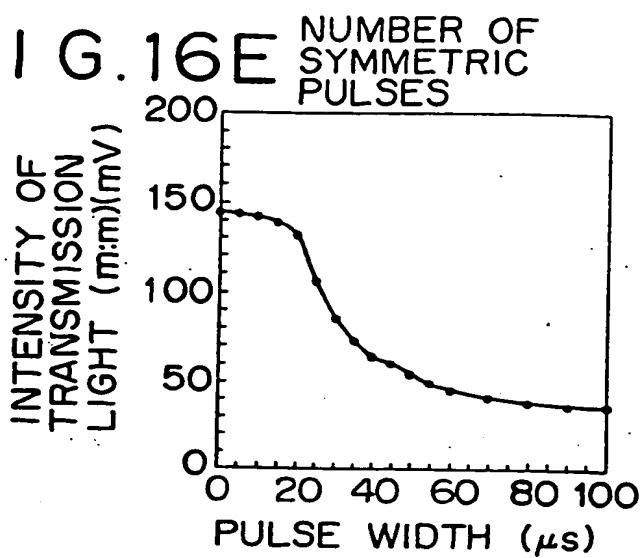


FIG. 16E



F I G. 17

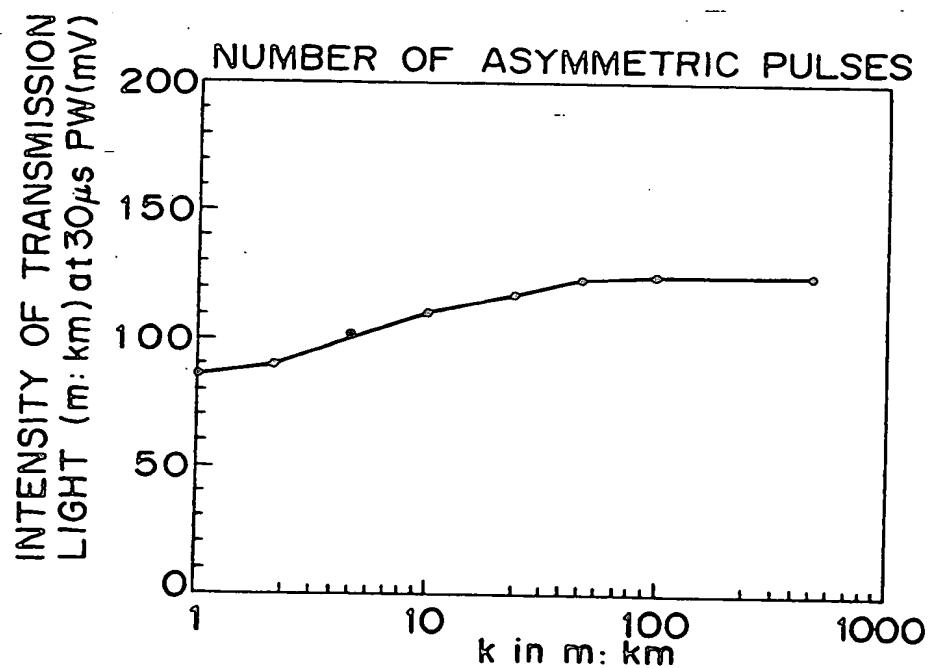
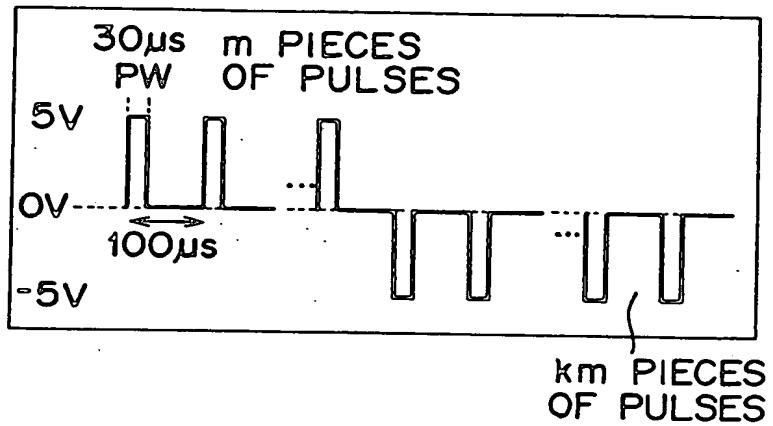


FIG. 18A

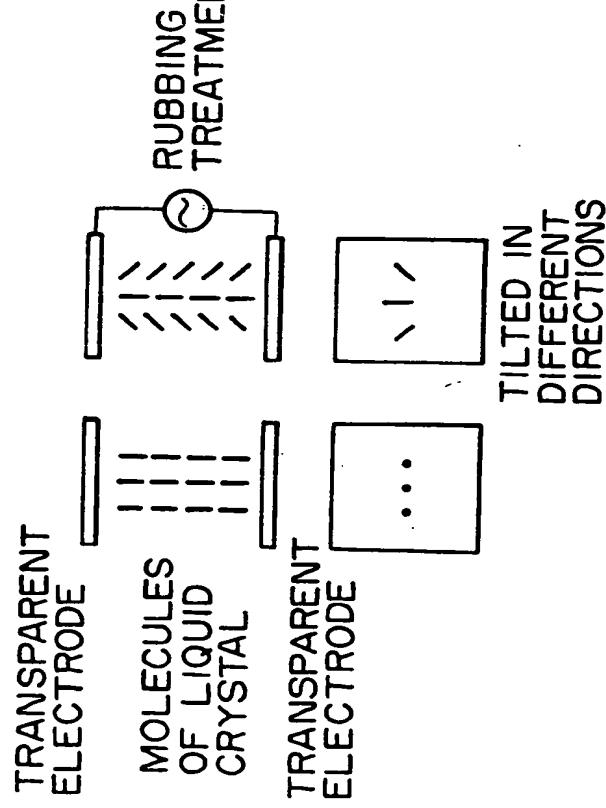


FIG. 18B

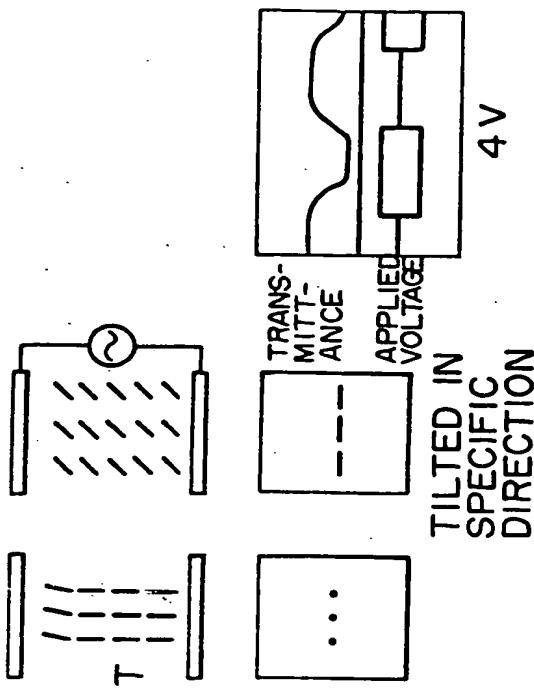


FIG.18C

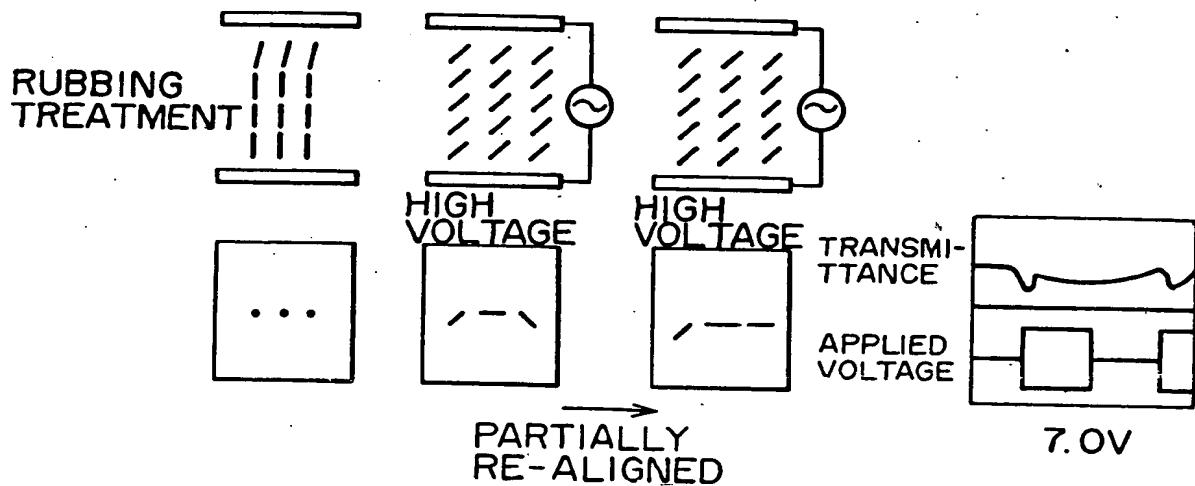


FIG.18D

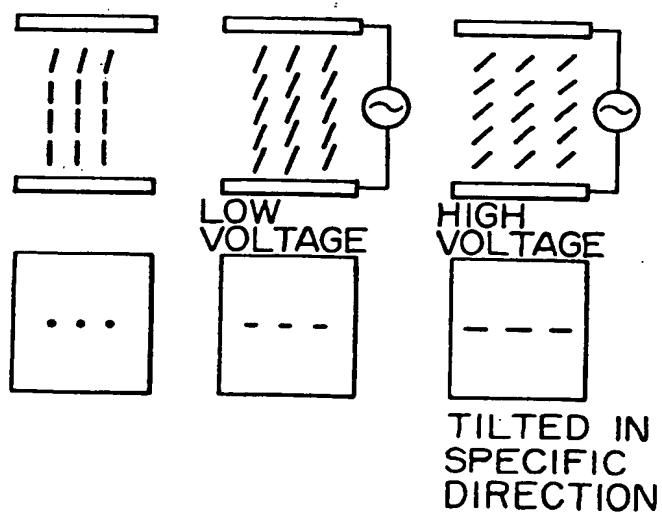
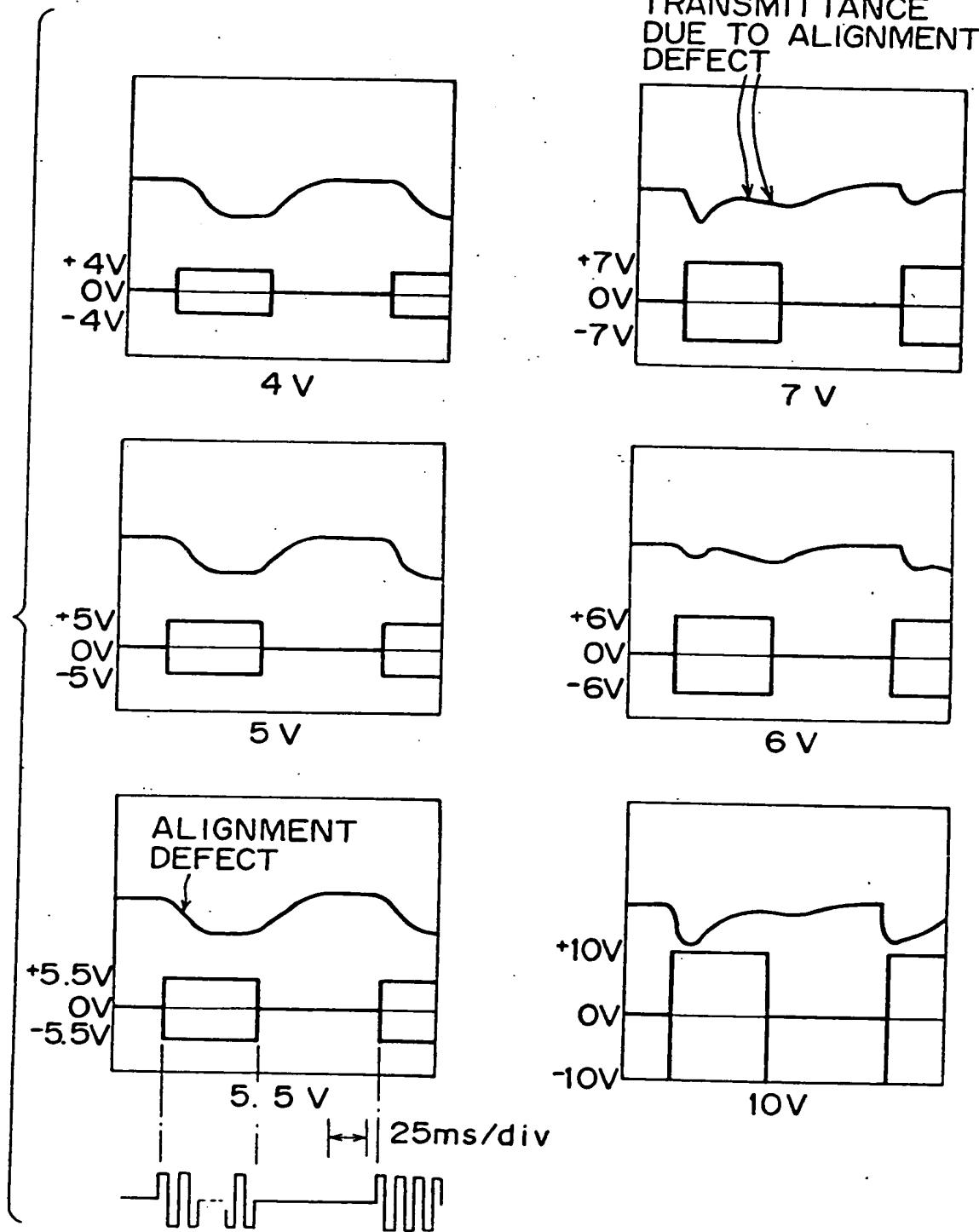


FIG. 19

NO REDUCTION IN TRANSMITTANCE DUE TO ALIGNMENT DEFECT



F I G. 20

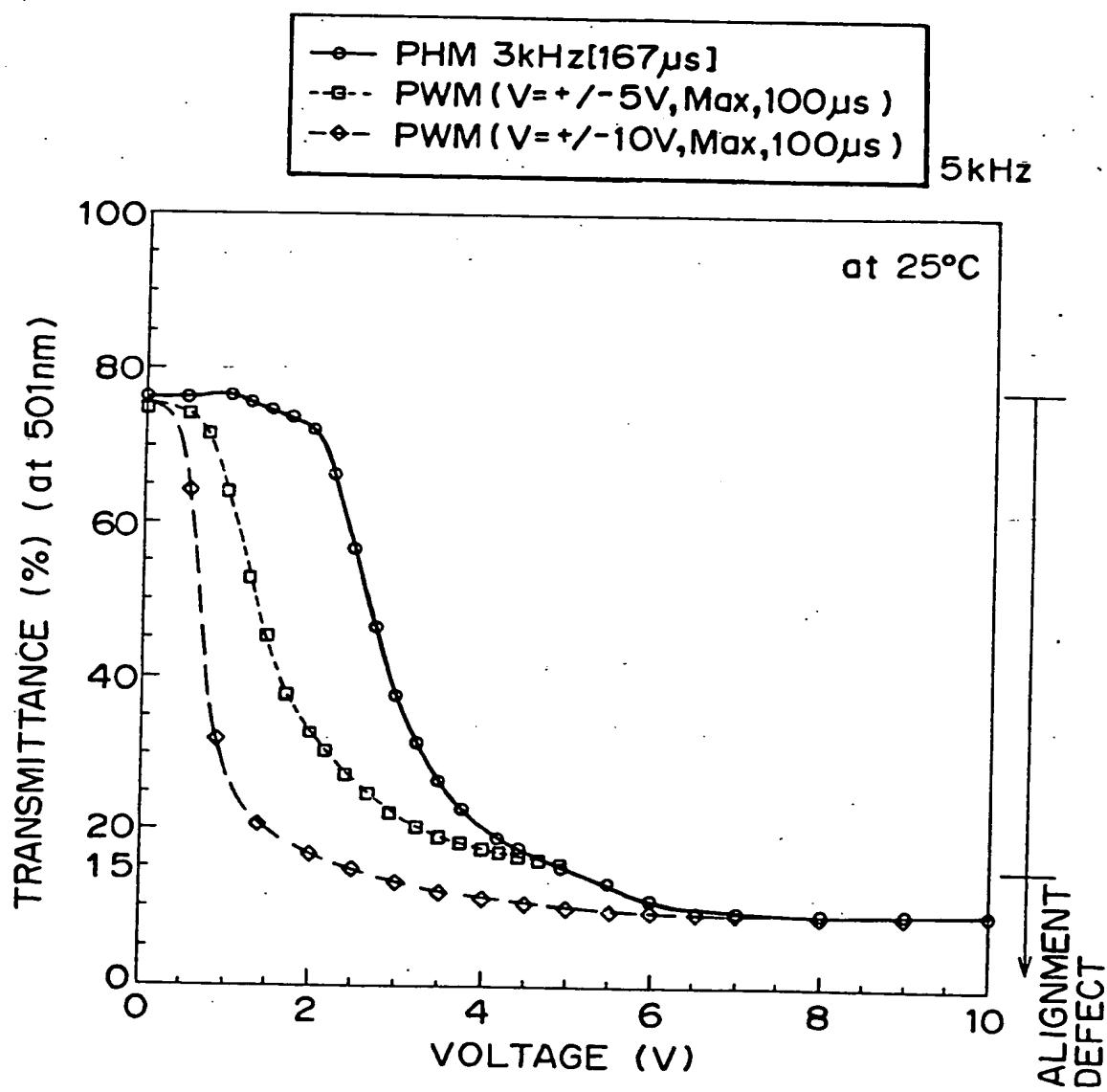


FIG. 21A

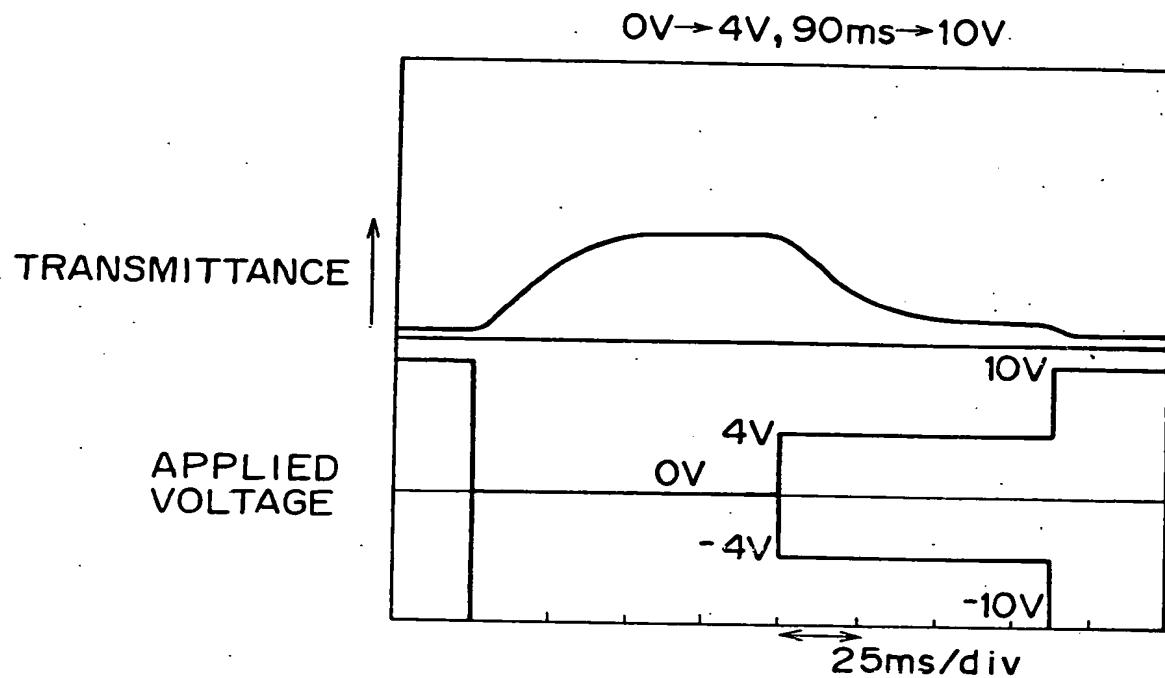


FIG. 21B

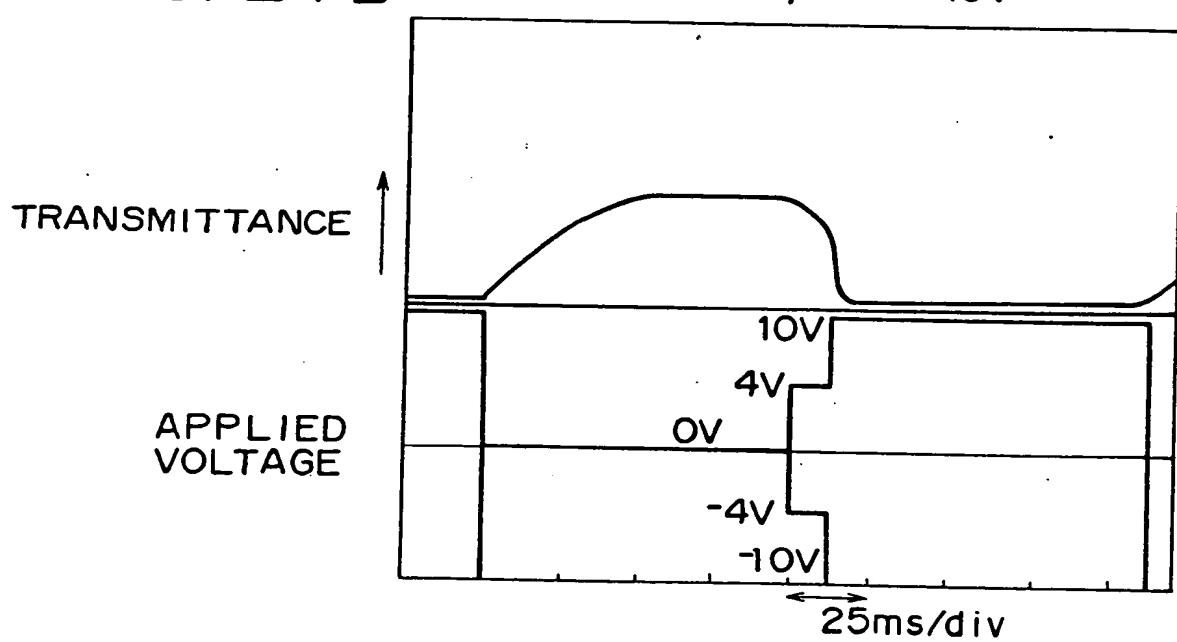


FIG. 22

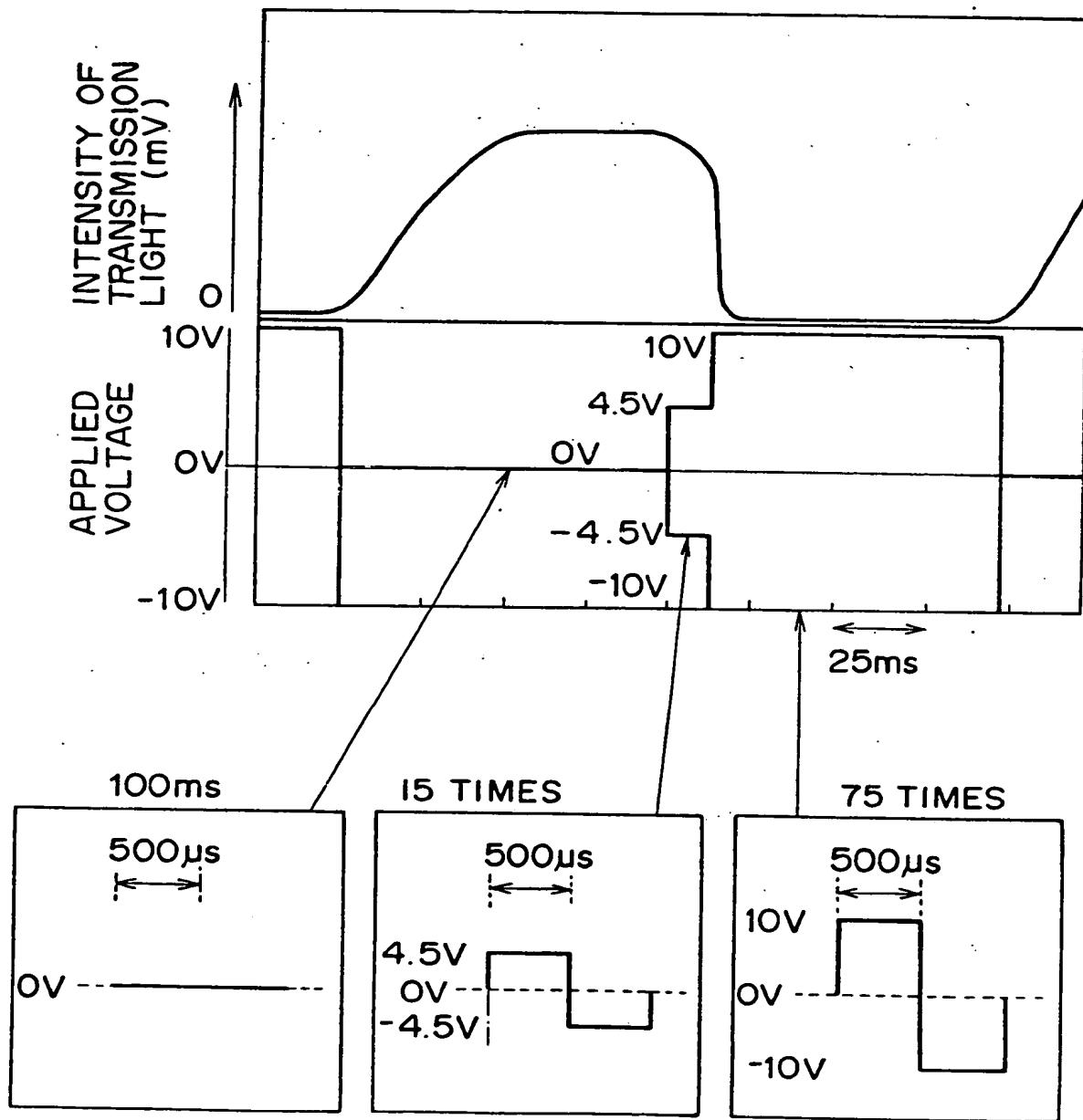
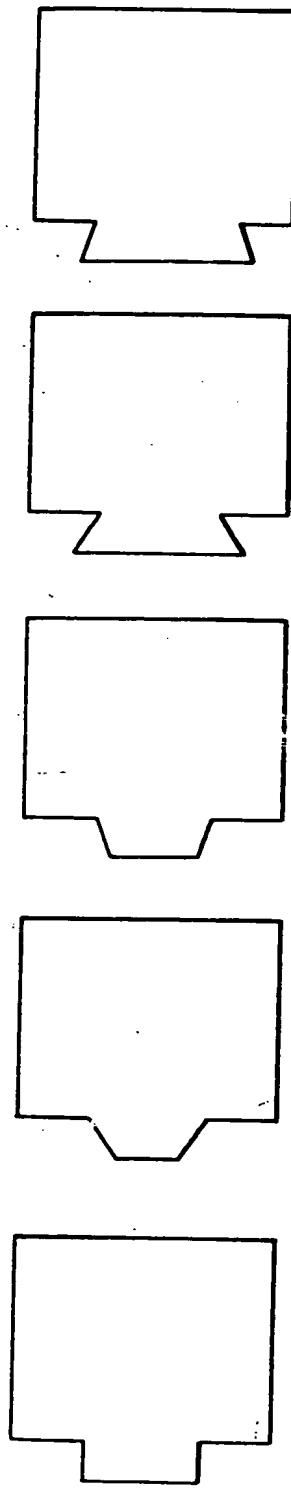
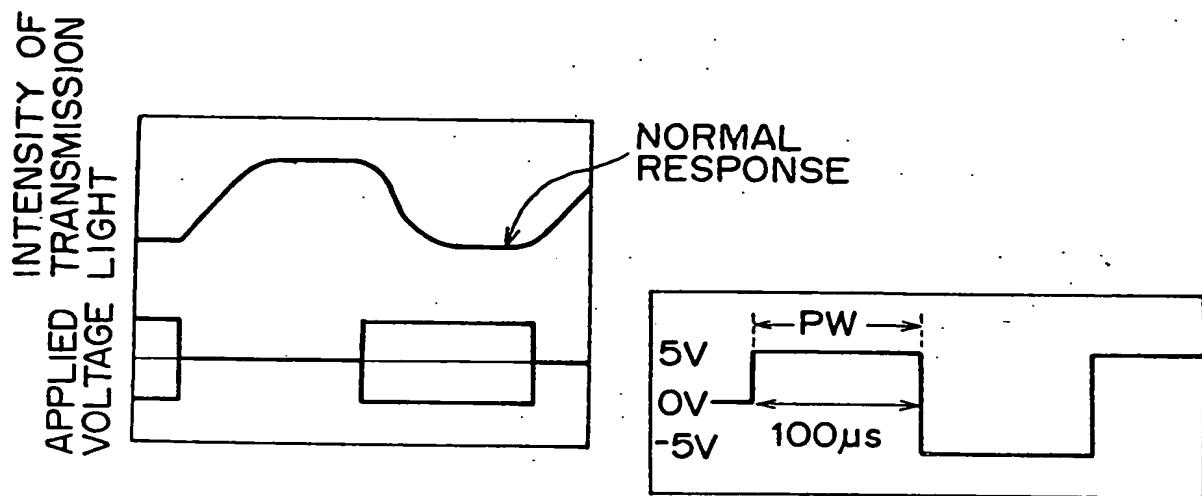


FIG.23A FIG.23B FIG.23C FIG.23D FIG.23E



F I G. 24A



F I G. 24B

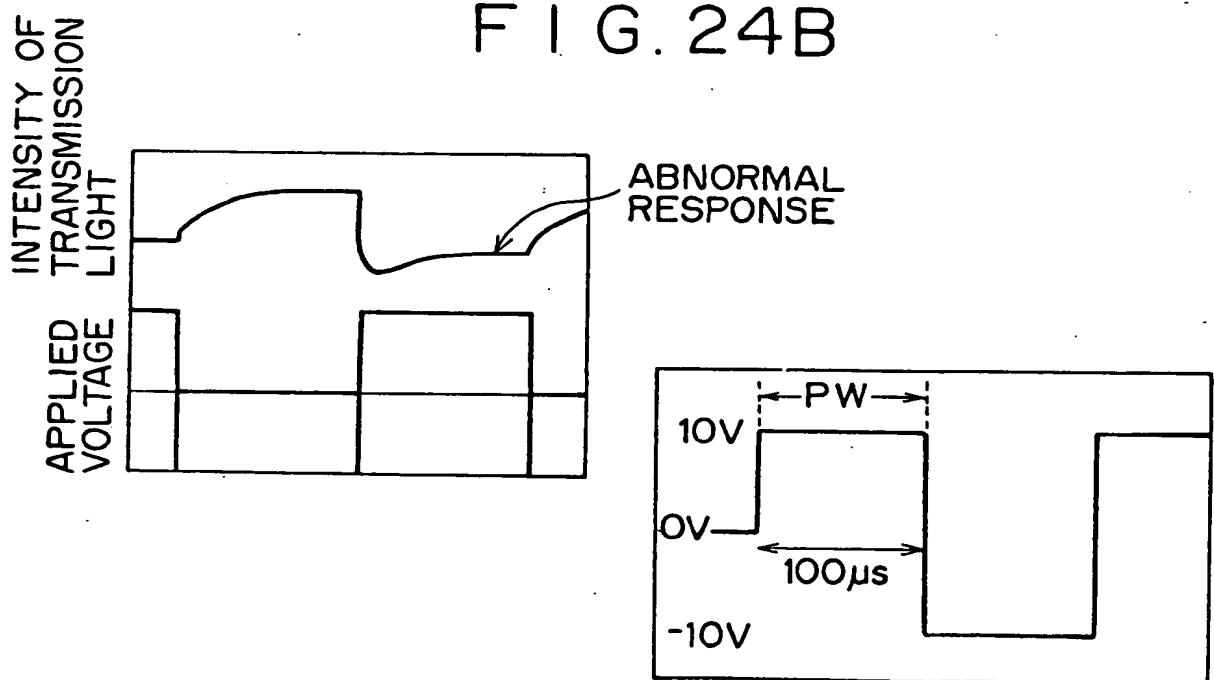
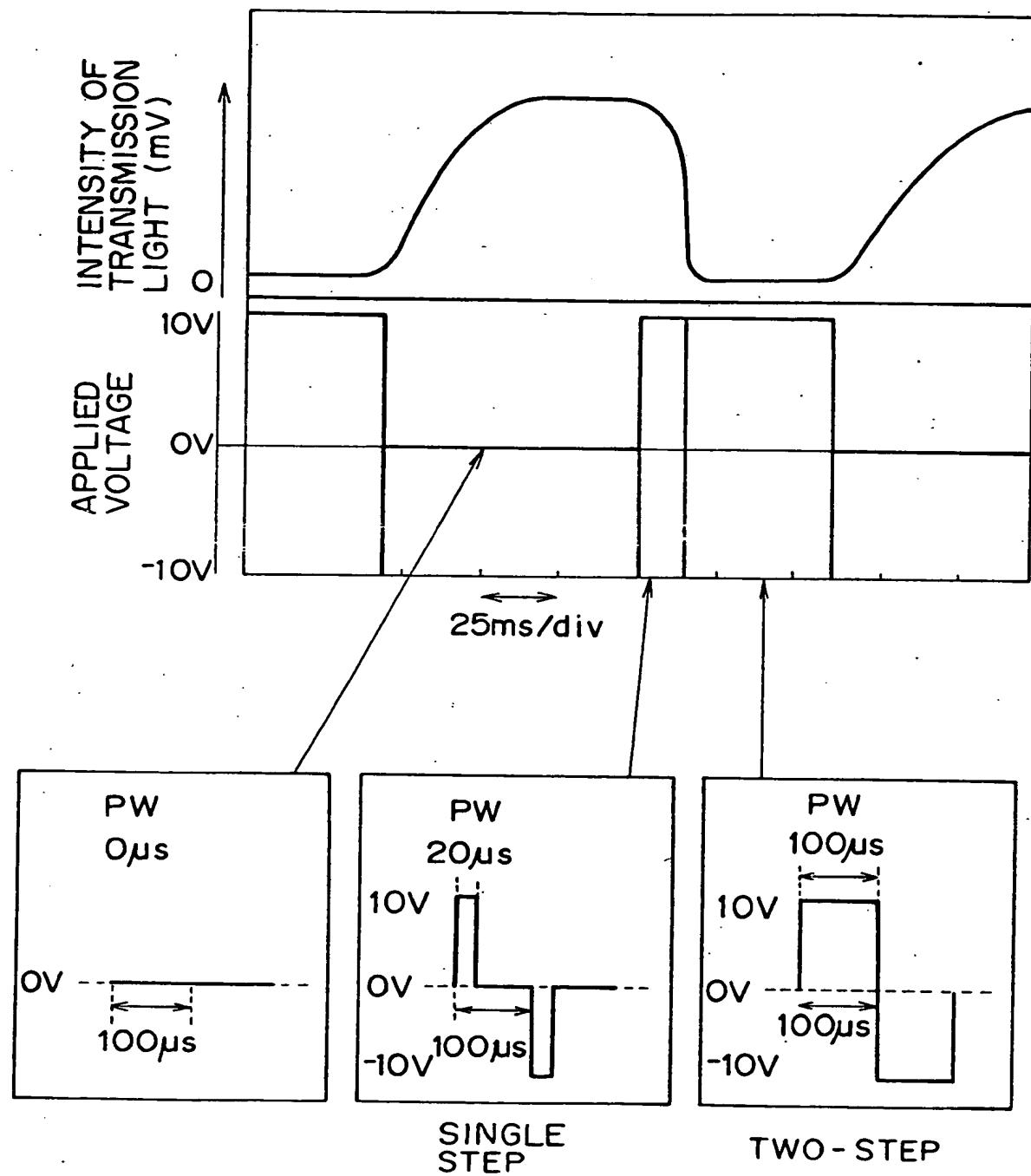


FIG. 25



F I G. 26

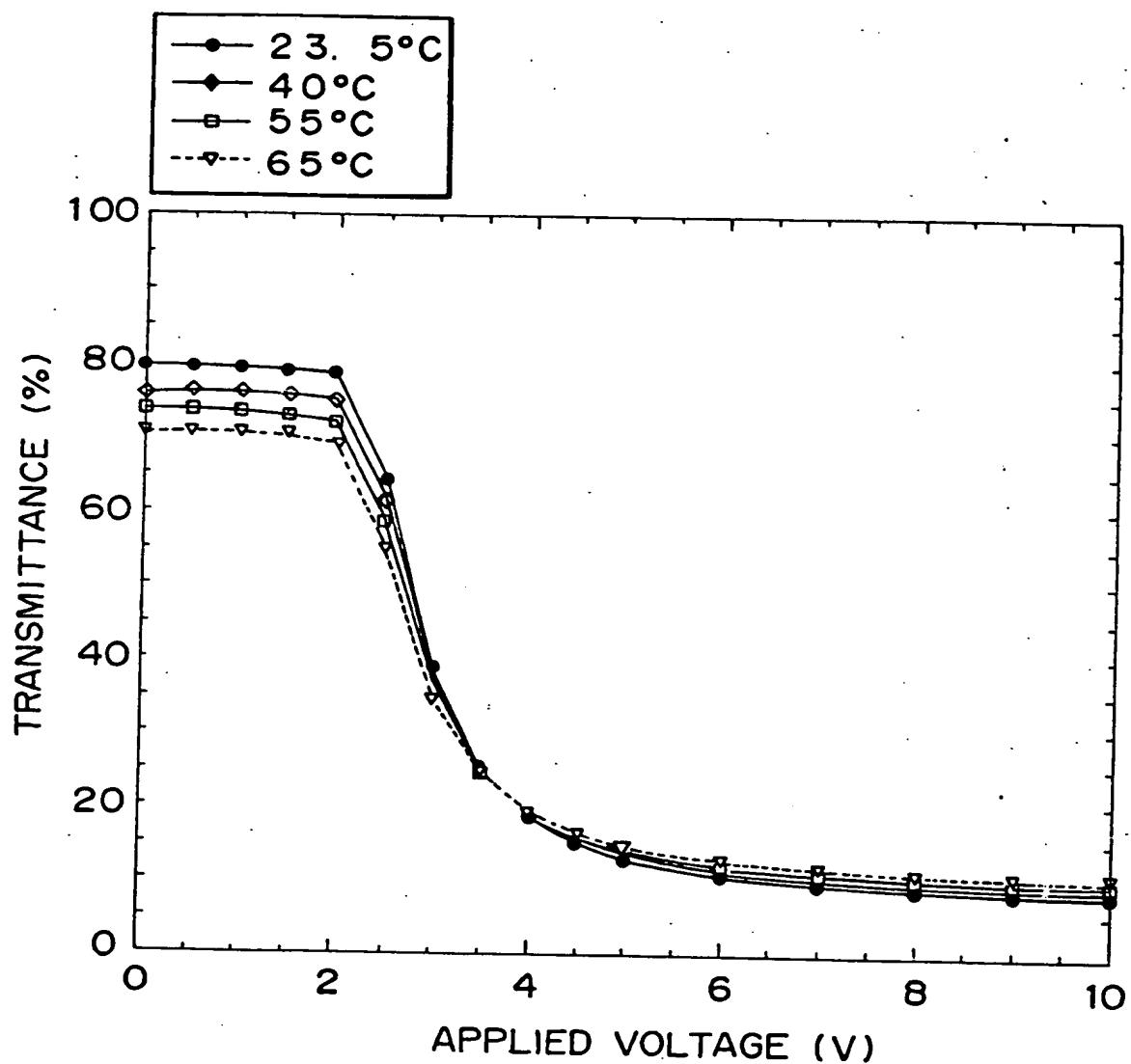


FIG. 27

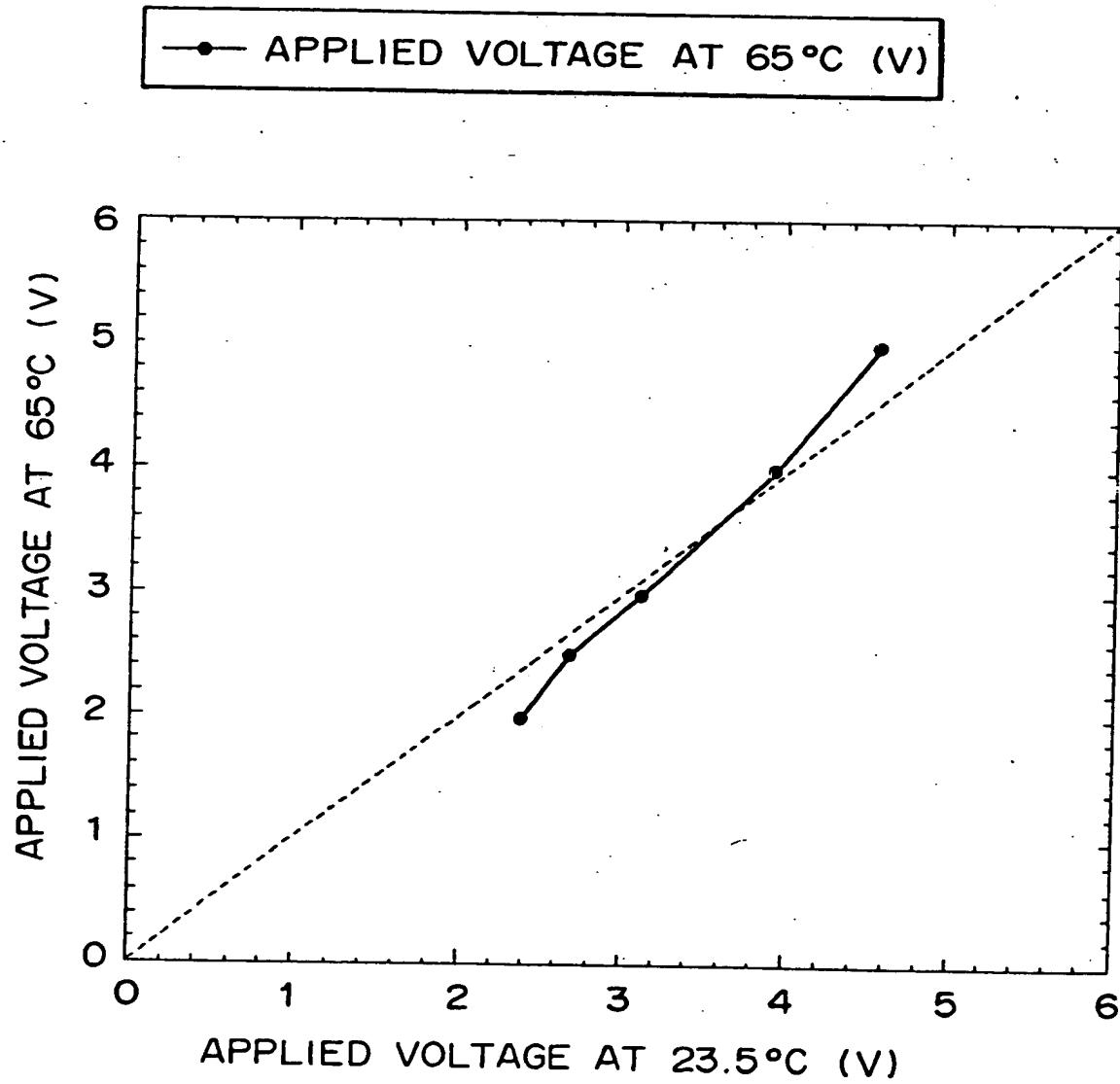


FIG. 28

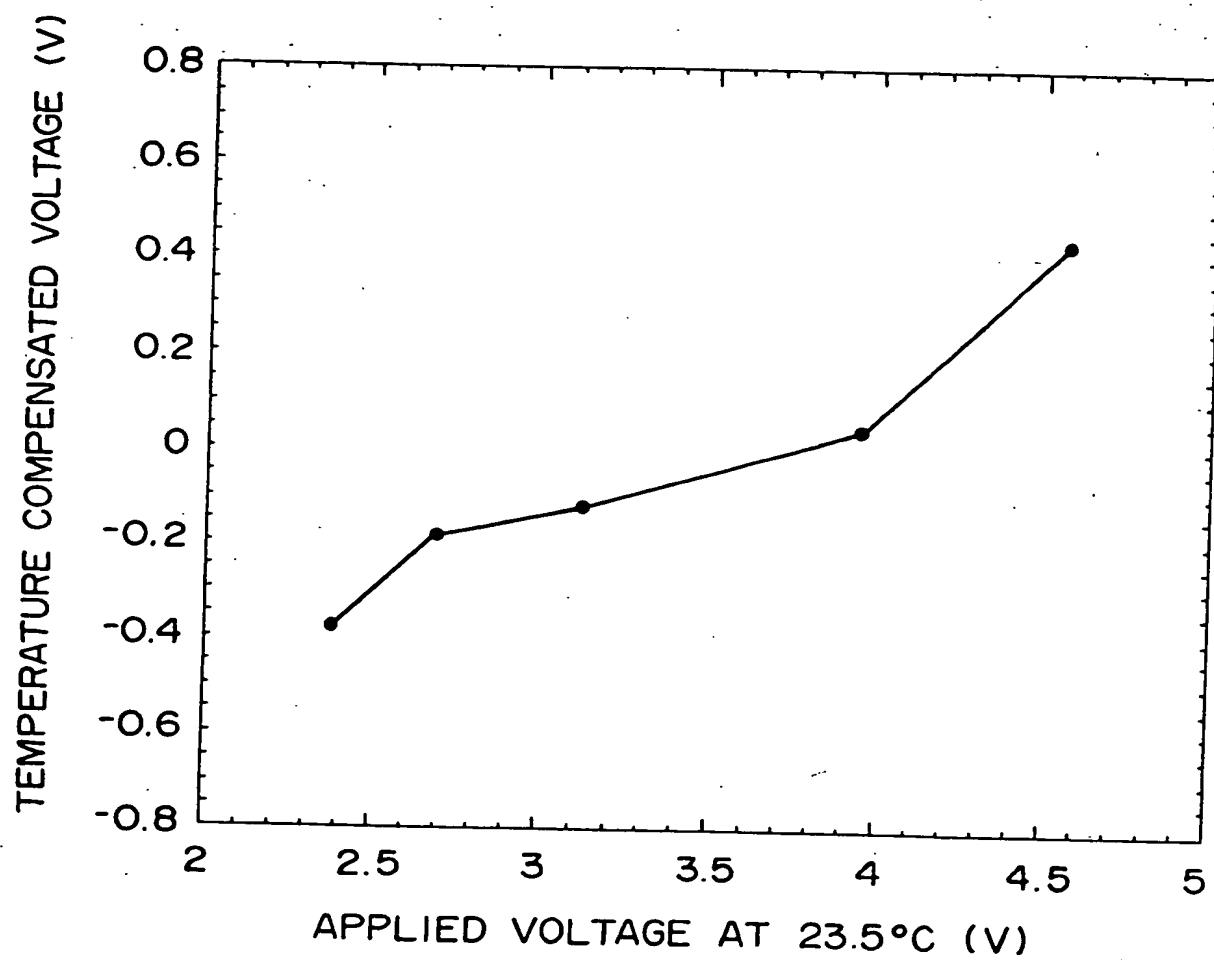


FIG. 29

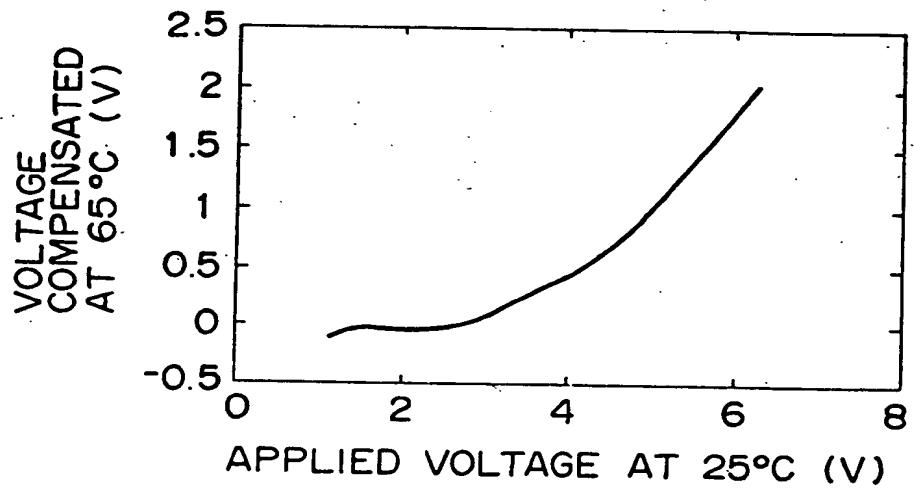


FIG. 30

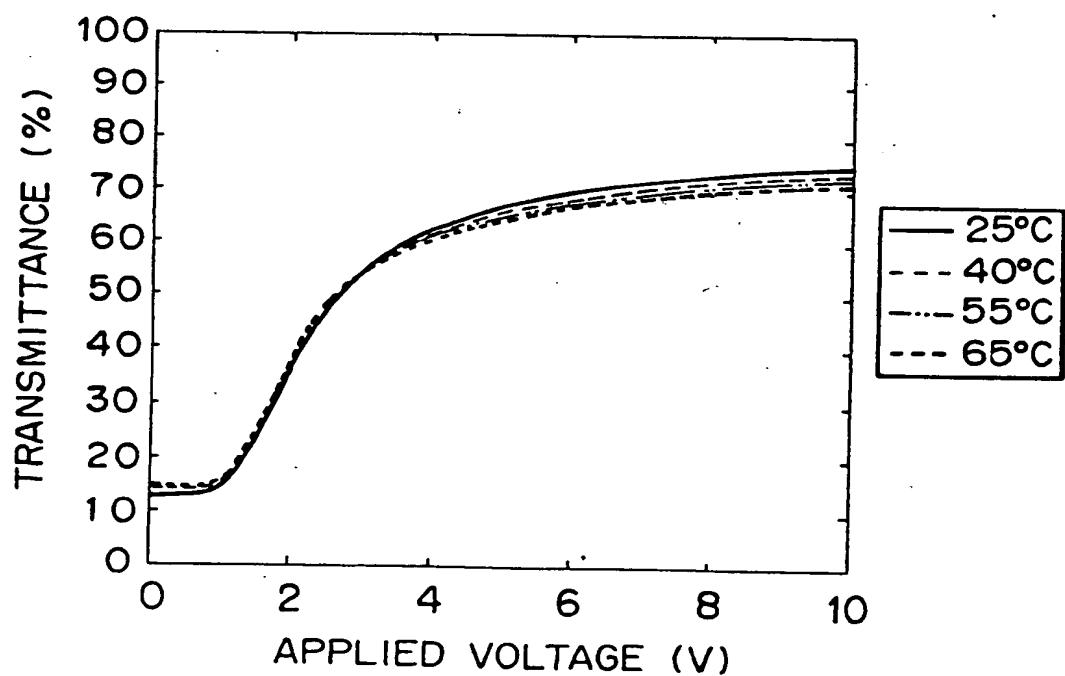


FIG. 31

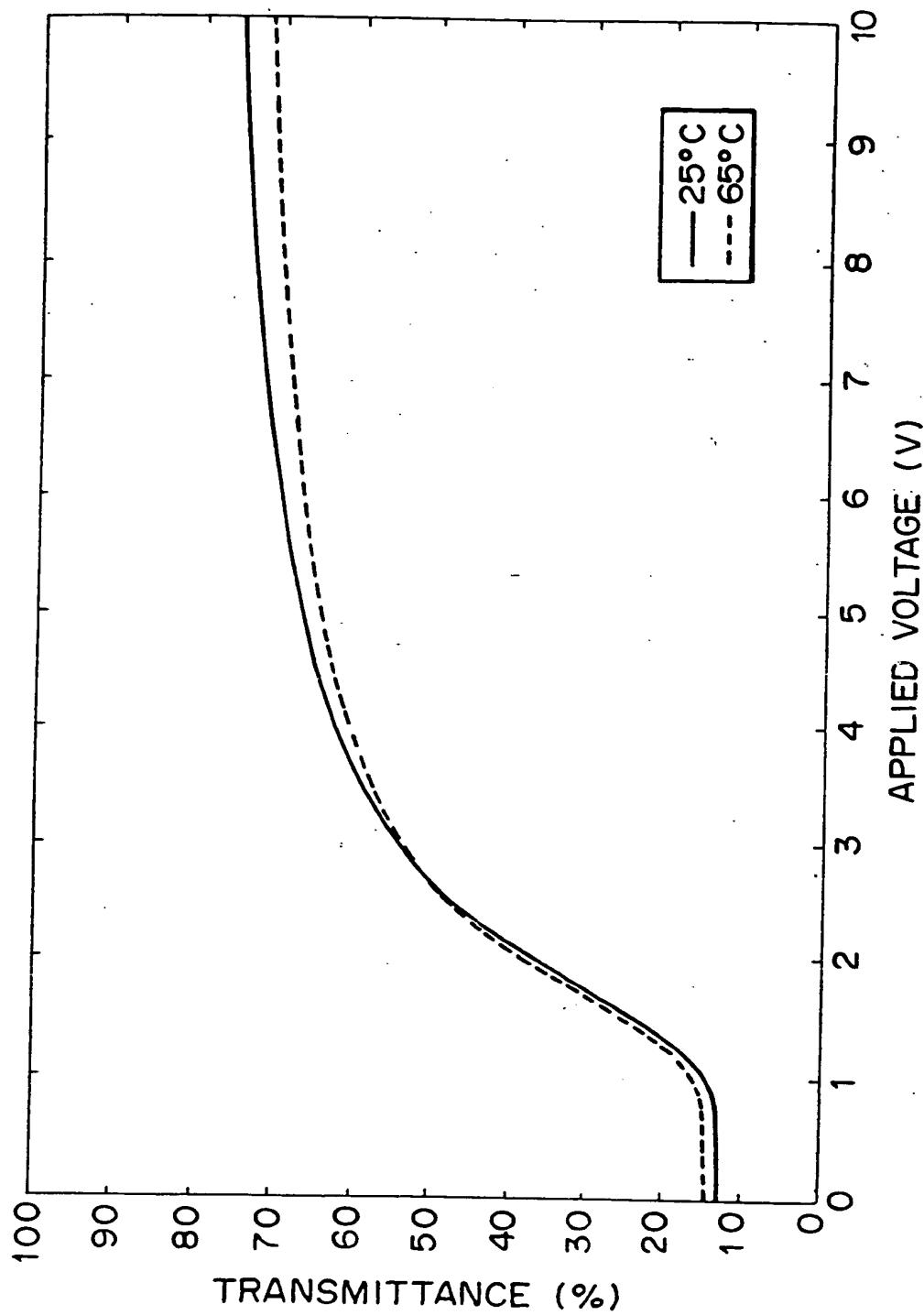


FIG. 32

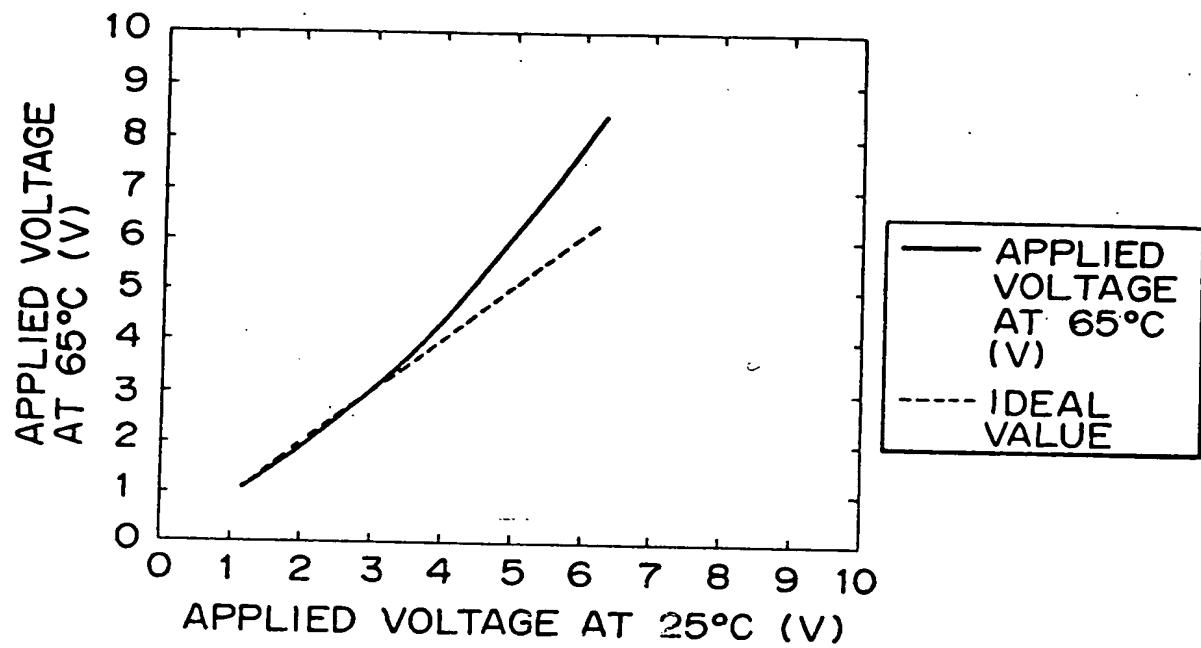


FIG. 33

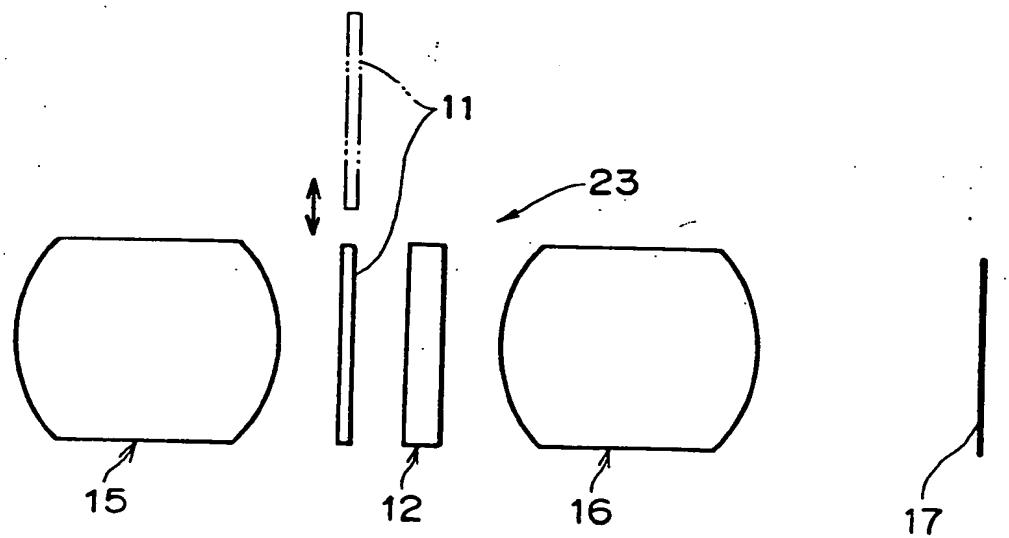


FIG. 34

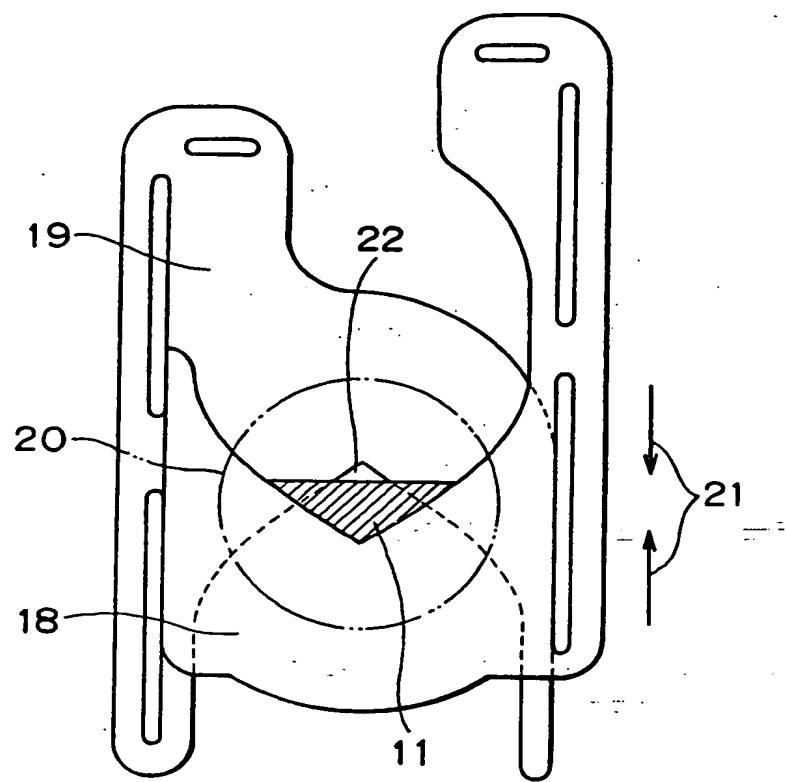


FIG. 35A

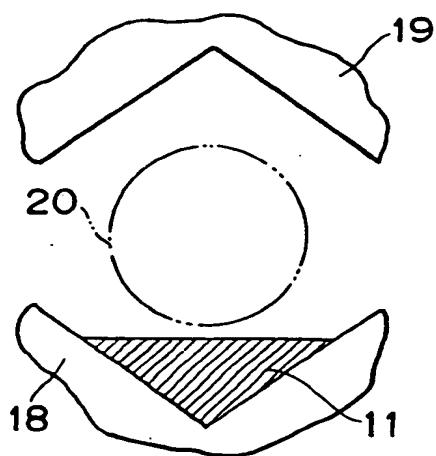
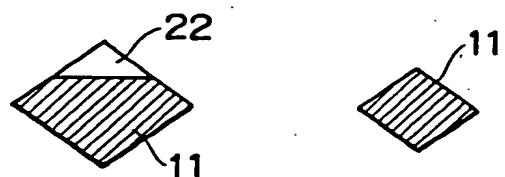


FIG. 35B FIG. 35C



F I G. 36

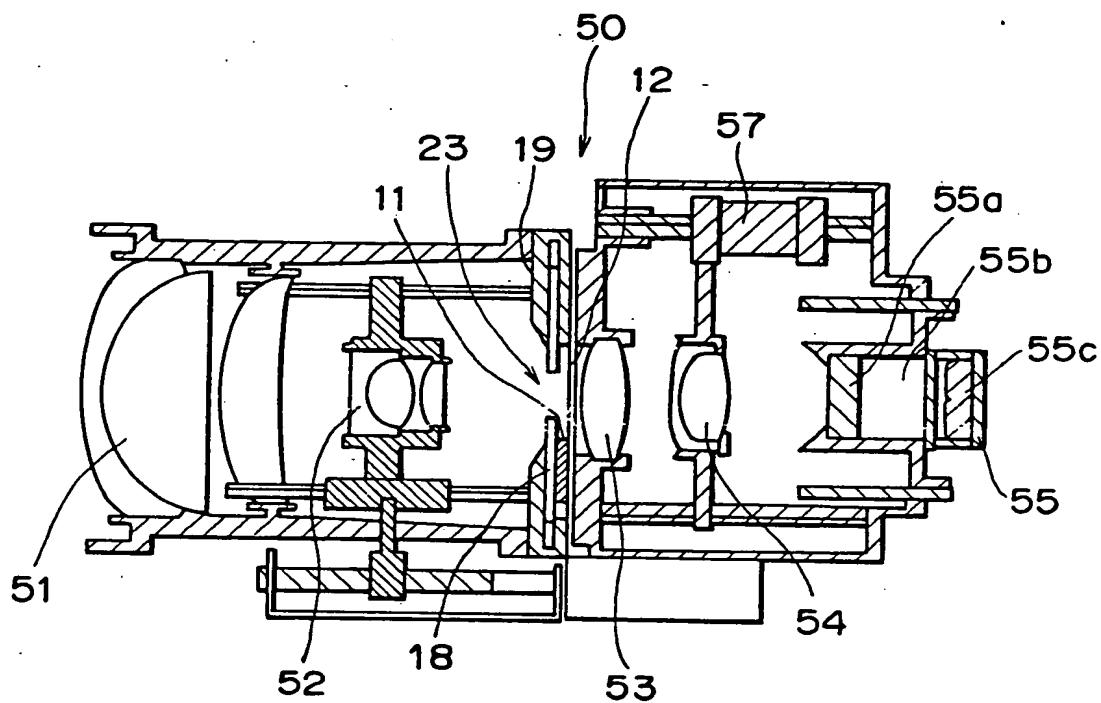


FIG. 37

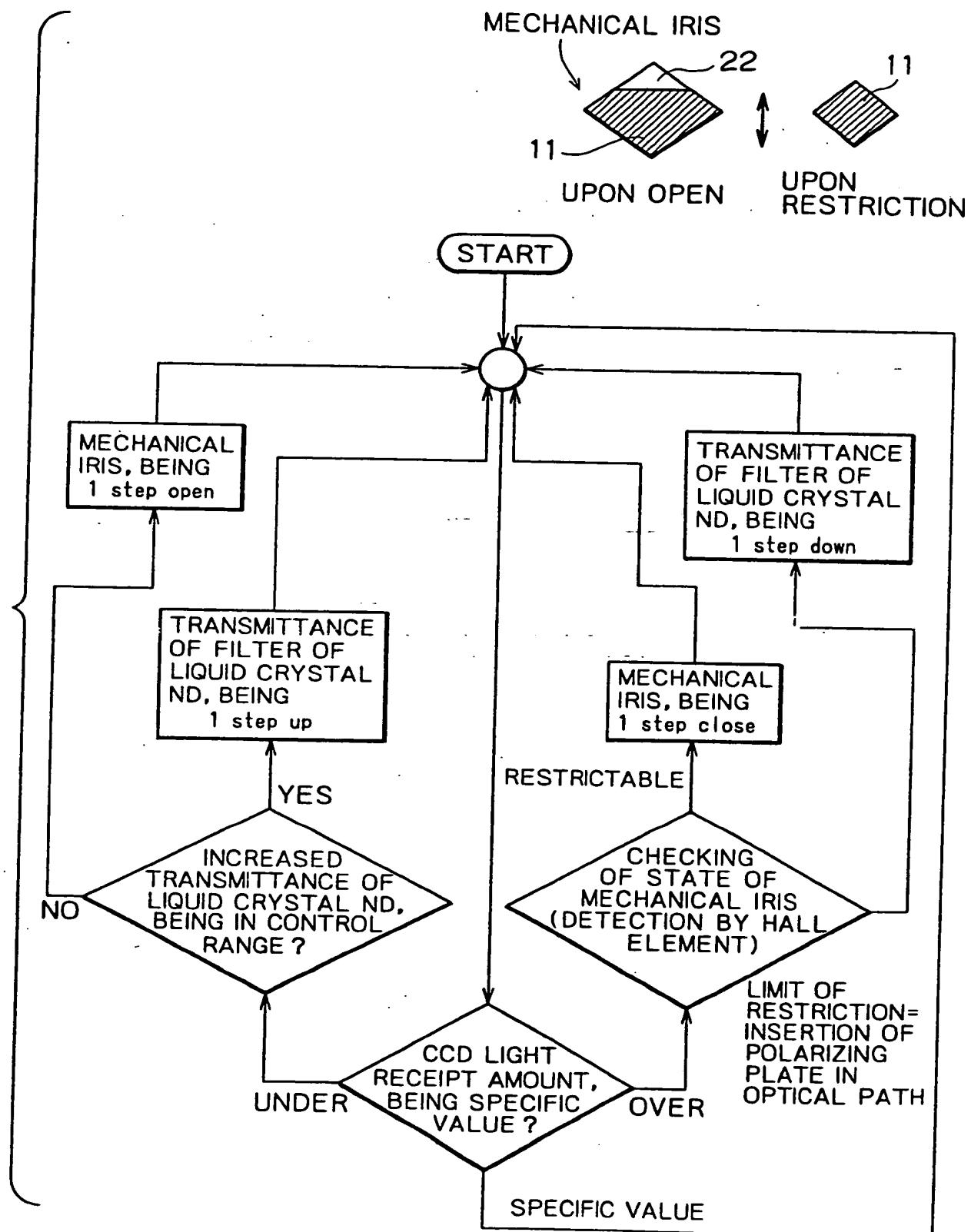


FIG. 38

